DOCUMENT RESUME

ED 150 417 CE 014 842

AUTHOR	Sullivan, Daniel
TITLE	Educating the Public About Health: A Planning Guide. Health Planning Methods and Technology Series.
INSTITUTION	Health Resources Administration (DHEW/PHS), Rockville, Md. Bureau of Health Planning and Resources Development.
REPORT NO	DHEW-HRA-78-14004
PUB DATE	Oct 77
CONTRACT	HRA-230-76-0074
NOTE	123p.
EDRS PRICE	MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS	*Community Involvement; Community Resources; Consumer Education; Decision Making; Definitions; Educational Improvement; Educational Objectives; Educational Planning; Educational Resources; *Educational Strategies; Guides; *Health Education; Human Resources; Interagency Cooperation; Program Development; Program Evaluation; Program Guides; *Program Planning; *Public Education; *Public Health; Resource Materials; Teaching Methods

ABSTRACT

A comprehensive overview of major issues involved in educating the public about health, with emphasis on methods and approaches designed to foster community participation in health planning, is presented in this guide. It is intended to provide ideas for those engaged in health education program development with ideas for use in planning, implementing, and evaluating health education programs. The guide starts with a presentation of reasons for placing high priority on health education. One chapter considers the need for policies on defining health education, involving many persons in decision making, and establishing a process and structure for planning. Most of the guide focuses on steps in the planning process as they relate to health education: defining problems, setting goals, designing plans, implementing plans, and evaluating programs. A health education program development scorecard pulls together the highlights of the guide in a form that can be used either as a checklist during program development or as a self-evaluation tool after completion of a plan or a program. Sources of assistance to health planning agencies are suggested, including staff, local and state organizations, regional resources, and national agencies; a list of references cited in all chapters is included. (TA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED150417

Educating the Public About Health: A Planning Guide

Health Planning Methods and Technology Series

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

October 1977

prepared under
Contract No. HRA 230-76-0074

CE 014 842

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Health Resources Administration
Bureau of Health Planning and Resources Development
Division of Planning Methods and Technology

DHEW Publication No. (HRA) 78-14004

The Division of Planning Methods and Technology, BHPRD, through the National Health Planning Information Center, is a primary resource for current information on a wide variety of topics relevant to health planning and resources development. To facilitate the dissemination of information to health planners, the Center will publish selected monographs in three series:

1. Health Planning Methods and Technology

   This series will focus on the technical and administrative aspects of the health planning process, including such areas as methods and approaches to the various aspects of the health planning process, techniques for analyzing health planning information and problems, and approaches to the effective dissemination and utilization of technical information.

2. Health Planning Information

   This series will focus on data and information to support the health planning process, including sources of information and data for use in health planning.

3. Health Planning Bibliography

   This series will focus on general and specialized bibliographies that relate to topical subject areas in health planning.

Educating the Public About Health--A Planning Guide is the sixth publication in the Health Planning Methods and Technology Series.

FOREWORD

This Guide presents a comprehensive overview of major issues involved in educating the public about health with emphasis on methods and approaches designed to foster community participation in health planning.

Health education is a stated priority of the National Health Planning and Resources Development Act of 1974 (P.L. 93-641). It calls for "the development of effective methods of educating the general public concerning proper personal (including preventive) health care and methods for effective use of available health services."

Another of the ten priorities calls for promotion of activities for the prevention of disease which is largely an educational endeavor. Nearly all of the remaining eight priorities also require educational components in order to be effective.

This Guide was developed to assist Health Planning Agencies and others in the planning and development of health education activities designed to influence the behavior of individuals and institutions in ways which lead to improved health of the population.

The growing public interest and strong support by public and private agencies for health education activities provides an unprecedented opportunity as well as responsibility for Health Planning Agencies.

Harry P. Cain II, Ph.D.
Director
Bureau of Health Planning and
  Resources Development
Health Resources Administration

Acknowledgments

This Guide was developed by Daniel Sullivan, Health Education Consultant, Auburn, Maine. Assistance and guidance necessary to the success of the Project were provided by Anne Rolfe, DHEW, Bureau of Health Planning and Resources Development.

Appreciation is extended to the Advisory Committee to the project, members of which are listed on the following page and to the more than 200 representatives of health planning, health education, consumer and related interests across the country who contributed to the development of this Guide.

Advisory Committee

Adelbert Campbell
Health Systems Management Corp.
7700 Edgewater Drive
Oakland, CA 94621

Helen P. Cleary
(Past President, Society for
Public Health Education)
Associate Professor
Department of Community Medicine
The Medical School
University of Massachusetts
Worcester, MA 01605

W. Michael Cook
Associate Director
Health Planning/Development Center
(Center for Health Planning)
57 Forsyth Street
Atlanta, GA 30303

William H. Creswell, Jr., Ed.D.
Head, Department of Health
& Safety Education
University of Illinois
Champaign, IL 61820

Mrs. Hamilton Crockford
Chairperson, School Health
Education Committee
Capital Area Comprehensive
Health Planning Council
2015 Staples Mill Road
Richmond, VA 23230

Brian A. Dobrow
Executive Director
Golden Empire Health
Systems Agency
650 University Avenue
Sacramento, CA 95825

Peggy Kopf
(American Association for
Comprehensive Health Planning)
Puget Sound Health Systems Agency
601 Valley Street
Seattle, WA 98109

Grace I. Kurchinski
Florida Office of Health Planning
and Development
1323 Winewood Boulevard
Tallahassee, FL 32301

Donald M. Merwin
National Center for Health Education
Suite 2424
44 Montgomery Street
San Francisco, CA 94104

Beverli Reding
Chairperson, Education Committee
Comprehensive Health Planning
Council of Spokane County
W. 807 Holland
Spokane, WA 99218

Janice Ruff
Planning Coordinator
Bureau of Personal Health Services
Michigan Department of Public Health
3500 North Logan
Lansing, MI 48914

Ruth Soumah
National Urban League
500 East 62nd Street
New York, NY 10021

Marvin Strauss
Community Health Service
University of Cincinnati
331 French Hall
Cincinnati, OH 45221

Frances E. Williamson
Assistant Chief
State Health Planning and
Development Agency
Ohio Department of Health
P.O. Box 118
Columbus, OH 43216

Joan M. Wolle
Chief
Health Education Center
State Department of Health
201 West Preston Street
Baltimore, MD 21201

CONTENTS

FOREWORD ii

ACKNOWLEDGMENTS iii

I. INTRODUCTION 1

II. IMPORTANCE 2

- Factors Affecting Health 2
- Education's Role 3
- Action Deficiencies 4
- Potential Benefits of Education 5
- Educational Gaps 7
- New Impetus 10

III. POLICIES FOR PLANNING 13

- Definitions 13
- Involvement 18
- Planning Framework 22

IV. DEFINING PROBLEMS 33

- Steps 33
- Depth 46
- Examples 47
- Documentation 50
- Involvement 51

V. SETTING GOALS 52

- Definitions and Standards 52
- Involvement 61
- Examples 62

VI. DESIGNING PLANS 63
  Definitions and Standards 64
  Steps 65
  Example 71

VII. IMPLEMENTING PLANS 79
  Standards 79
  Methods 81

VIII. EVALUATING PROGRAMS 84
  Standards 84
  Steps 85
  Example 91

IX. HEALTH EDUCATION PROGRAM DEVELOPMENT SCORECARD 93

X. SOURCES OF ASSISTANCE 104
  Health Planning Agency Staff 104
  Local and State 104
  Regional 105
  National 105

XI. REFERENCES 108

I. INTRODUCTION

The purpose of this guide is to provide ideas for use in planning, implementing, and evaluating health education programs. It is intended for anyone engaged in health education program development, including health planning specialists, health education specialists, and members of committees or task forces - especially those working with health planning agencies.

Because of the widely varying backgrounds of persons who may use the guide, different aspects of it will probably be useful to different persons. Health planners are already familiar with provisions of the health planning law and related guidelines summarized in the guide, but may find the discussions of health education helpful. The reverse may apply to health educators. Hopefully consumer and provider members of committees concerned with health education will discover something of value in each of these areas.

The guide starts with a presentation of reasons for placing high priority on health education. One chapter considers the need for policies on defining health education, involving many persons in decision-making, and establishing a process and structure for planning. Most of the guide focuses on steps in the planning process as they relate to health education: defining problems, setting goals, designing plans, implementing plans, and evaluating programs.

A health education program development scorecard pulls together the highlights of the guide in a form that can be used either as a checklist during program development or as a self-evaluation tool after completion of a plan or a program. One chapter suggests sources of assistance. The guide ends with a list of references cited in all chapters.

II. IMPORTANCE

Persons involved in health planning aim all their efforts at one ultimate target: helping people become and stay as healthy as possible.

FACTORS AFFECTING HEALTH

Experts say four types of factors determine people's success in achieving good health. Dr. Henrik L. Blum, a professor of health planning (former county director of public health and practicing physician), identified them in 1968 as the following "inputs to health"--congenital (this became heredity in a 1974 revision), environment, behavior, and health care services.[1,2] In 1974, the Government of Canada adopted a "health field concept" consisting of these similar "broad elements"--human biology, environment, lifestyle, and health care organization.[3]

Each of these four groups of forces has a different amount of impact in shaping health. More than one of the factors exert influence in most situations. They often interact with each other. In assessing the importance of each input to health, Dr. Blum ranks them in the following order: environment, behavior, services, and heredity. He considers services, which for some time have consumed nearly all of the attention and dollars in the health field, only about two-thirds as important as behavior, and one-third as important as the combined physical and social environment. Others believe individual behavior or lifestyle has more effect on health than does the environment. Advocates of both views agree either of these factors offers more potential for health improvement than would further expansion of medical care.

Available facts support this priority on environment and behavior. Residents of heavily polluted cities have much more emphysema, respiratory infection, and lung cancer, for example, than do rural residents.[4] Children in low-income families have seven times more vision defects, six times more hearing defects, and five times more mental illness than children in families with higher income.[5] Adults live much longer if they regularly follow such practices as: eating properly (including breakfast), abstaining from alcoholic drinks or taking them only in moderation, smoking no cigarettes, exercising vigorously at least two or three times a week, maintaining desirable weight, and getting seven to eight hours of sleep each night.[6] On the other hand, no studies show that increasing medical care beyond a basic minimum will add years to life--or add life to the years.[7]

Because of such findings, the U.S. Department of Health, Education, and Welfare has placed high priority on prevention, with special emphasis on behavior and environment. One of this agency's plan documents declares:

> *In recent years it has become apparent that the best hope of achieving any significant extension of life expectancy lies in the area of disease prevention. ...in the absence of a major scientific breakthrough (e.g., a cancer cure), further expansion of the Nation's health system is likely to produce only marginal increases in the overall health status of the American people. Obviously, we must continue efforts to correct the inequities and the maldistribution of services in the current system, but, in the long run, the greatest benefits are likely to accrue from efforts to improve the health habits of all Americans and the environment in which they live and work.*[8]

EDUCATION'S ROLE

How does public education relate to the four factors that affect health? Education is a process of helping people develop their abilities to make informed decisions about their actions. Public education, therefore, is essential when causes of health problems can be overcome by people's actions. For example:

* To achieve a physical and social environment conducive to good health requires substantial public support and action at all levels--community, group, and individual.

* Healthful behavior (personal health-promotional and preventive practices, self-care of minor ailments, appropriate use of services when needed, and selection and carrying out of needed diagnostic and treatment procedures) is action--by definition.

* Health services often become responsive to public interests and needs only through broad, significant, knowledgeable involvement of consumers.

11

- To modify heredity's impact on health, persons affected have a right and need to take part in decisions and action.

Thus all four major factors that impinge on health--especially environment and behavior, now recognized as the factors offering the greatest hope--call for decisions and actions by the public.

This is not a new idea. The founders of the World Health Organization recognized it thirty years ago when they included the following statement as a basic principle in the WHO Constitution:

> *Informed opinion and active cooperation on the part of the public are of the utmost importance in the improvement of the health of the people.*[9]

ACTION DEFICIENCIES

The current picture of public actions related to health, however, is gloomy. Despite increased attention and progress in recent years, people in many places still have not mobilized to upgrade the physical environment to quality levels. This applies to air (including cigarette smoke in public places), toxic substances, housing, accident hazards (at home, on the highway, at work or school, etc.), noise, congestion, transportation, radiation, waste disposal, control of insects and rodents, land use, beauty, and availability of exercise facilities (e.g., safe bike paths). Social conditions, too, (such as employment, income, education, recreation, human relations, community cohesion, stress, crime control, and justice)--which can greatly influence health--leave much to be desired.

Cigarette smoking kills more than five times as many U.S. citizens each year--about 250,000--as were killed--46,000--in the entire Vietnam war![10] Immunization of children against measles, polio, and other diseases has fallen to dangerously low rates.[11] Many millions of persons are overweight, do not eat nutritious meals,[12] and get very little of the kind of exercise they need[13]--all of which, along with smoking, heighten their risk of getting heart disease, stroke, and other leading cripplers and killers.

About three out of four persons with symptoms suggesting cancer delay seeing a physician for a month or more.[14] One of every three patients, on the average (some say one out of two), fails to carry out needed treatment procedures.[15] Many health organizations and practitioners do not provide real opportunities for consumers to influence their policies and programs--which often results in services that may suit health personnel, but that consumers see as unfriendly, uncoordinated, and inappropriate.

The costs of these and other gaps in public actions are staggering:

- Just one behavioral health problem, alcoholism, costs more than 25 billion dollars a year in lost production, health and medical services, motor vehicle accidents, alcohol programs and research, criminal justice actions, and welfare[16] (to say nothing of income loss for families and income-tax loss for society).
- Many of the 160 billions of dollars now spent annually on medical care[17] go unproductively down the drain because of the one-third to one-half of patients who do not carry out needed treatment procedures.
- The failure of individuals and society to take effective preventive actions to reduce heart disease, cancer, stroke, accidents, homicides, suicides, venereal diseases, drug abuse, emphysema, dental defects, and other conditions costs many additional billions of dollars each year.
- The toll in unnecessary human misery is also heavy: e.g., pain, disfigurement, confinement, dependence, family disruption, and grief.

POTENTIAL BENEFITS OF EDUCATION

Educating the public about health can greatly reduce many of these problems. Here are some examples:

- Randomly selected persons with high risk of heart disease who participated in an educational program combining mass media with intensive face-to-face instruction scored 38 percent better in reducing major risk factors--blood pressure, cholesterol, smoking, and body weight--than did a comparable group that had had no educational program.[18]
- Randomly assigned persons with asthma who took part in a single discussion-decision meeting used the emergency clinic half as much in subsequent months as did persons

with asthma who received regular care but no group education.[19]

- Persons diagnosed as having high blood pressure, after counseling by physicians who had been tutored about educational methods, scored better than a control group (that received regular physician care) in taking prescribed medicine (61 percent vs 32 percent) and in blood pressure control (69 vs 36 percent).[20]

- Of 1,139 referenda about fluoridation reported between 1950 and 1969 (generally involving community education both for and against fluoridation), 473--or 41.5 percent --approved this public health measure which reduces tooth decay by about 60 percent.[21] As of December 31, 1975, 49.4 percent of the total U.S. population was served with natural or adjusted fluoridated water.[22] The range was from a high of 98.4 percent in the District of Columbia to a low of 3 percent in Nevada.

Many other examples could be given. Health education thus has the potential of helping all people develop their ability to carry out sound personal and community health practices. This could enable many to:

1. Achieve new heights of vigorous well-being and self-fulfillment;
2. Add many productive years of contributions to society;
3. Eliminate millions of days each year of avoidable disability, suffering, and wasted talents;
4. Contribute to containment of individual, family, and societal costs for medical care, absenteeism, and welfare.

Various groups of national education experts over the past sixty years have indicated their confidence that health education would greatly benefit American youth:[23]

1918 - The Commission on Reorganization of Secondary Education (National Education Association) listed health as the first of seven "cardinal principles of education."

1920 - The Committee on Standards for Use in the Reorganization of Secondary School Curricula (NEA) selected health as the first of four objectives.

1937 - The American Youth Commission showed health as one of six objectives of education.

1938 - The Progressive Education Association concluded, after an eight year study, that health should be the first of eleven educational goals.

1938 - The Educational Policies Commission (NEA) included personal and community health as objectives under one of the four broad purposes of education in American democracy.

1944 - The Educational Policies Commission listed health as one of five education objectives.

1952 - The Educational Policies Commission included health as one of ten "imperative needs of youth".

1960 - The White House Conference on Education specified health as one of fourteen areas about which American youth need education.

Public education about health is not a panacea. Despite good educational experiences, individuals and communities may still make informed decisions to take actions the experts consider hazardous to health. This may result from the high cost of a recommended action, the pleasure of a deeply-ingrained habit, society's placement of a high value on a high-risk practice, or other forces.

Furthermore, a recent survey of 23 health education programs selected because of their relatively strong evaluation components showed no measurement of long-term effects.[24] Various analyses, however, including that one, agree health education has demonstrated it can be effective, at least on a short-term basis. If well planned and carried out, it probably could also have many long-range benefits.

EDUCATIONAL GAPS

Unfortunately people have not realized the full potential of health education. Deficiencies have been partly qualitative, but mainly quantitative. In other words, health education just has not occurred at all in many places.

The President's Committee on Health Education, in more than twelve months of study, identified many serious shortcomings in health education performance. The committee based its findings on papers it commissioned, conferences of experts, a survey of 600 producers of health education materials and programs, 71 hours of testimony taken at regional hearings from 300 persons from 47 states and Puerto Rico, and meetings with representatives of Federal agencies, voluntary health agencies, school health organizations, professional associations, philanthropic foundations, neighborhood health centers, prepayment plans and private insurance companies, business and labor. and mass media.

In 1973 the committee reported these gaps in the practice of health education:

> *Although many of the major causes of illness and death can be affected by individual behavior, health education is a neglected, under-financed, fragmented activity with no agency inside or outside of government responsible for establishing short- or long-term goals.*
>
> *Virtually no component of society makes full use of health education. That includes the health care delivery system, the educational system, voluntary health agencies, business and labor, prepayment plans and the insurance industry, mass media and others. ...*
>
> *...school health education in most primary and secondary schools either is not provided at all, or loses its proper emphasis because of the way it is tacked onto another subject such as physical education or biology, assigned to teachers whose interests and qualifications lie elsewhere. Evidence abounds that health education in schools is not effective, even when it is attempted. ...*
>
> *...there has been little effort to bring together the fields of health education, parent education and early childhood education for planning and evaluation. ...*
>
> *More than ten million adults are enrolled in continuing education programs. That important and growing segment of the educational system is virtually untouched by health education. ...*
>
> *The lack of health educational programs in hospitals and physicians' offices is tragically prominent...*
>
> *...business, industry and labor are not significantly involved in overall programs that could contribute to sound*

> *off-job safety and health practices that could also benefit on-job attendance and productivity.*[25]

An earlier analysis of health education practices in a national sample of 135 school systems found a:

> *...majority of situations where health instruction is virtually non-existent, or where prevailing practices can be legitimately challenged. What passes for a program of health education in far too many instances is dubious.*[26]

Among problems cited by respondents were these: ineffectiveness of instruction methods; insufficient time in the school day for health instruction; lack of coordination of the health education program throughout the school grades; inadequate professional preparation of staff; neglect of the health education course when combined with physical education; inadequate facilities and instructional materials; and lack of specialized supervisory and consultative services.

A recent study conducted by the American School Health Association determined that only sixteen states require comprehensive school health education, and only thirty states certify teachers of health for preparation in health education.[27] Other research shows that even states with such regulations often ignore them. The previously mentioned high priority placed on school health education over the past sixty years by national education leaders has produced little action in the classroom.

As for money invested in health education, the President's Committee learned that DHEW used less than one-fourth of one percent of its 1973 health appropriation for health education. Other Federal agencies allocated an even smaller percentage of their health resources. The level found in state and territorial health departments was less than one-half of one percent.[25]

The Committee's report concluded:

> *...health education is hardly a brush-stroke on the total picture of health care...*[25]

NEW IMPETUS

Health education organizations have advocated more emphasis in this field for over a quarter of a century. Only in recent years, though, have the general public and key organizations not primarily concerned with health education begun to acknowledge the importance of educating the public about health.

The following forces, among others, probably have stimulated this new momentum:

- The more than doubling of medical care expenditures between 1970 and 1976--from $69.2 billion to $139.3 billion a year (the 1976 amount is more than a five-fold increase over the $25.6 billion spent in 1960).[28]
- Widespread concern about such problems as drug and alcohol abuse and environmental pollution.
- People's desire to gain control over their institutions and their own destinies--in the wake of a long and frustrating war, extensive corruption among leaders of government and big business, and increasing invasions of privacy and other individual rights.
- Escalation in the number and costs of malpractice suits, along with court rulings about physicians' responsibilities for obtaining patients' informed consent.

The public's enthusiasm now is wide and deep. Not only have people indicated in surveys that they want to learn about health, but they have demonstrated the intensity of this interest by the many millions of dollars they have spent.[29] There has been an explosion, for example, in the availability and use of health books, health foods, and health clubs. Groups designed to develop skills in meditation, relaxation, biofeedback, and interpersonal relations have multiplied. Many persons have paid $50 or more for courses on such subjects as weight-reduction, smoking cessation, and self-care of minor ailments.

Various types of national organizations have sensed the growing public interest. National conferences discussed the state of the art in health education and made recommendations. Among the sponsors were the Will Rogers Foundation (1973); National Cancer Institute (1973); Association of

American Medical Colleges (1974); National Heart, Lung, and Blood Institute (1975); and the NIH Fogarty International Center for Advanced Study in the Health Sciences jointly with the American College of Preventive Medicine (1975).

Some organizations developed policies and/or initiated action:

* DHEW's Social Security Administration issued guidelines in July, 1974 for Medicare reimbursement of costs of educating patients,[30] and DHEW's Social and Rehabilitation Service indicated most states' Medicaid programs could be expected to follow these Medicare guidelines.[31]

* The Blue Cross Association adopted policies in August, 1974 for financing organized patient education services (but indicated it is up to local affiliates to implement them).[32]

* The American Hospital Association approved a statement in 1972 on patients' rights[33] and a statement in 1974 on the roles and responsibilities of hospitals and other health care agencies regarding health education.[34] In 1975 and 1976 AHA conducted surveys and training activities about education of patients.[35]

* The American Public Health Association placed high priority on health education in 1975, carrying out a project on education related to ambulatory care for low-income families,[36] and activities encouraging health workers to serve as good examples in following personal preventive practices.[37] A joint committee of APHA and the Society for Public Health Education developed guidelines for health education programing with low-income and minority groups.[38]

New organizational focal points for general health education program development, recommended in 1973 by the President's Committee, were established. DHEW set up a Bureau of Health Education at its Center for Disease Control in Atlanta in 1974. After a year of developmental work by the National Health Council, a private National Center for Health Education was organized as a separate entity in 1975; it is located in San Francisco. To foster coordination of health education activities of various parts of DHEW and to maintain liaison with related efforts of other organizations, DHEW established an Office of Health Information and Promotion in the Office of the Assistant Secretary for Health in October, 1976 (as prescribed by Congress in P.L. 94-317, the National Consumer Health Information and Promotion Act).

This law also authorizes DHEW to formulate national goals and strategies regarding health education, recommend policies to obtain needed manpower resources, conduct and support necessary programs, undertake and support research and demonstrations, foster exchange of information and cooperative activities, and provide training and other technical assistance about health education.[39]

Other Federal laws, too, incorporate requirements for some emphasis on health education--by DHEW as well as by organizations using Federal grant or contract funds. These include laws about smoking, nutrition, heart and lung diseases, cancer, diabetes, arthritis, alcoholism, drug abuse, mental health, venereal diseases, family planning, maternal and child health, immunization, emergency medical services, health maintenance organizations, and provision of services for Indians, migrant laborers' families, low-income families, rural families, and Federal employees.[40]

While organizations, laws, and activities at the national level are important, most of the real direct health education action must take place through comprehensive program development in local communities--with appropriate facilitating functions performed at areawide and state levels. Congress responded to this need by including health education as one of ten health priorities that state and areawide health planning agencies must consider in implementing P.L. 93-641, the National Health Planning and Resources Development Act. That priority is:

> *The development of effective methods of educating the general public concerning proper personal (including preventive) health care and methods for effective use of available health services.*[41]

Another of the ten priorities calls for promotion of activities that prevent disease, which is mainly an educational endeavor. Nearly all of the other eight priorities also require public education components.

The people of this country want and need more and better education about health. Health planning agencies and many other organizations and individuals now have an unprecedented opportunity, as well as a responsibility, to do something about this vital interest and need.

III. POLICIES FOR PLANNING

The preceding pages discuss why the public should be educated about health. This section deals in a general way with the what, who, and how of planning for health education.

Persons setting the stage for decision-making need to establish policies on:

1. A definition of health education;
2. Involvement of individuals and organizations; and
3. A planning framework.

DEFINITIONS

What Term?

First, what term should be used to designate the field of educating the public about health?

Over the years the most popular label has been "health education." Lately, however, this term has taken on an additional meaning: development of health personnel. "Area health education centers" (or consortia, networks, or systems), for example, have arisen during the last several years primarily to improve recruitment, selection, preparation, distribution, and utilization of health workers. Involvement of some of these organizations in education of the public as well as professional development has compounded the ambiguity.

"Community health education" is subject to similar confusion since some of these personnel-development agencies stress they are community-based. A few even have "community health education" in their organizational names.

"Public health education" was popular during the 1940s and 1950s. In fact, two major professional organizations still use it: Society for Public Health Education and Public Health Education Section of the American Public Health Association. Some persons argue this term may be seen as covering activities of only governmental health agencies. "Health education of the public" or "public education about health" get around this problem, but they are considered unwieldy.

The burgeoning consumer movement has created recent interest in the term "consumer health education." Many persons point out, however, that while some of the needs people have for health education pertain to their roles as consumers of services or products, most of their needs relate to non-consumer roles--e.g., personal practices, or citizenship responsibilities for helping bring about community actions that affect health.

"Health promotion" appears to be different from health education since it covers many actions carried out for people rather than actions that help people develop their ability to solve their own problems. And it usually excludes personal practices related to diagnosis, treatment, and rehabilitation --which call for education.

"Education for self-care" is too narrow, as it refers most of the time only to handling minor illnesses without medical assistance.

This document generally uses the term "health education," but attempts to make it clear in the title and occasionally throughout the report that the primary "educatees" are the public.

As a basis for considering what health education means, it is helpful to review definitions of each of the two words involved.

Health

The World Health Organization sees health as:

> *...a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.*[9]

This is the most widely cited definition of health. But it is frequently ignored in practice. Health programs are usually disease-control programs. Health services typically include only medical care. Health centers often function exclusively as ambulatory clinics. Health insurance covers diagnosis and treatment of illnesses and injuries, but seldom provides incentives for staying healthy. Most voluntary health agencies limit their activities to specific diseases. Health planning agencies have used a lot more paper and ink on plans for curative facilities and services than for promotion of well-being or prevention of health problems. Many health departments, to be sure, emphasize health promotion (as well as disease prevention and control), but they often separate physical from mental (or emotional), and pay little attention to social well-being.

During the 1950s and 1960s, Halbert L. Dunn, a staff member of the U.S. Department of Health, Education, and Welfare, tried to convince health personnel to apply the positive aspect of the WHO definition. He carried on a crusade to encourage programs aimed at "high-level wellness."[42] A generation passed, though, without much acceptance. Finally, during the last few years, some health workers have rediscovered this concept.

A few health leaders propose amendments to the WHO definition. Dr. Milton Terris, for example, would insert "...and the ability to function..." after "well-being."[43] Others believe it is essential to include a spiritual or moral dimension.

Dr. Henrik L. Blum thinks the WHO definition is a good general statement of the ideal. He sees a need, however, for additional language that would serve as a practical guide for measuring health status and setting achievable goals. He believes the following aspects of health (or lack of it) need to be considered:

> *(1) prematurity of death, (2) disease or departures from physiologic or functional norms appropriate to age and sex, (3) discomfort or illness, (4) disability or incapacity, (5) internal satisfaction, (6) external satisfaction, (7) positive health, and (8) capacity to participate.*[2]

Education

The Dictionary of Education defines education as:

> *The aggregate of all the processes by means of which a person develops abilities, attitudes, and other forms of behavior of positive value in the society in which he lives.*[44]

Some persons feel education should not attempt to motivate particular forms of behavior. After reviewing 500 publications about diffusion and adoption of innovations, for example, Everett M. Rogers recommended:

> *Change agents should be more concerned with improving their clients' competence in evaluating new ideas and less with simply promoting innovations per se.*[45]

Health Education

The marriage of health and education establishes a new family, but it has traits that resemble those of each partner's ancestors. Of the many definitions of health education developed over the past forty years, four are presented here--along with one prepared for this report.

In 1948 the National Education Association and American Medical Association published this definition:

> *Health education is the process of providing learning experiences for the purpose of influencing knowledge, attitudes, or conduct relating to individual, community, or world health.*[46]

In 1954 the World Health Organization's Expert Committee on Health Education of the Public, the nine members of which included two U.S. health education specialists, said the purposes of health education are:

> *(1) to make health a valued community asset; (2) to help individuals to become competent in and to carry on those activities they must undertake...to realize fully the state of health defined in the Constitution of the World Health Organization; and (3) to promote the development and proper use of health services.*[47]

In 1969 the World Health Organization's Expert Committee on Planning and Evaluation of Health Education Services, with one U.S. health educator among its ten members, stated that health education aims to:

> *...persuade people to adopt and sustain healthful life practices, to use judiciously and wisely the health services available to them, and to take their own decisions, both individually and collectively, to improve their health status and environment.*[48]

In 1973 representatives of seven professional health associations in the U.S. developed a definition. Working as the Joint Committee on Health Education Terminology, they came from the American Academy of Pediatrics; American Association of Health, Physical Education, and Recreation; American College Health Association; American School Health Association; Public Health Education Section and School Health Section of the American Public Health Association; and Society for Public Health Education. This group's definition:

> *A process with intellectual, psychological, and social dimensions relating to activities which increase the abilities of people to make informed decisions affecting their personal, family, and community well-being. This process, based on scientific principles, facilitates learning and behavioral change in both health personnel and consumers, including children and youth.*[49]

The author of this guide proposes the following definition:

> Educating the public about health consists of planned learning experiences and supportive activities that help people develop their abilities to evaluate behavioral options and their probable consequences, and make informed decisions about their responsibilities and actions concerning:
>
> 1. Personal practices aimed at promoting vigorous well-being, preventing avoidable disability and premature death, and effectively handling minor diseases and discomforts;
>
> 2. Prompt, appropriate use of health services when needed;
>
> 3. Selection and carrying out of needed diagnostic, treatment, habilitation, rehabilitation, and maintenance procedures; and
>
> 4. Involvement in community efforts (at local, area, state, regional, national and/or international levels) to develop effective, efficient, appropriate environmental programs, socioeconomic measures, and health services systems that facilitate health improvement.

Following are some criteria that may be used in selecting or developing a health education definition:

* Consistency with the rights and responsibilities of individuals to make their own decisions about personal and community health practices as long as these practices do not infringe on the rights of others;

* Indication of all types of action that individuals can take to contribute to better health for themselves and others;

* Consistency with current knowledge about how people can most effectively and appropriately be helped to develop their abilities to evaluate health-related behavioral options and their consequences as a basis for informed decision-making;

* Recognition of the need for supportive activities making it easier for people to overcome forces that hinder health-related actions they want to carry out;

* Usefulness as a practical guide for determining needs, setting goals and objectives, recommending activities, and evaluating progress in health education:

* Compatibility with definitions used by professional health education specialists;

* Understandability and acceptability not only by health education specialists but also by other health and education personnel, by consumer members of boards and committees, and by the general public.

INVOLVEMENT

Importance

Effective involvement of appropriate persons is the most important part of program development. Representatives of a broad range of consumer, health, and education interests should participate. They should have many opportunities for significantly influencing decisions and actions. This should cover every phase of planning, operation, and evaluation.

Why is broad, meaningful involvement so important? Because it:

1. Helps make programs practical and effective by fitting them to people's values, interests, and needs;

2. Generates fresh ideas;

3. Can help produce credibility, trust, and support;

4. Fosters development of awareness, interest, and abilities that may lead to commitment and action;

5. Facilitates coordination among organizations and individuals;

6. Is demanded by the rights of people in a democratic society to help shape and guide programs that affect them.

Health education specialists have been advocates of broad citizen participation for many years. Their beliefs were recently reaffirmed by a study that shows health plans are most likely to be successfully implemented if a high proportion of organizations, coalition makers, and persons who are knowledgeable about communities support the plans.[50] Heavy involvement in plan preparation is obviously an effective way to develop such support.

Relevant Groups

Health education planning should involve essentially the same types of representation mandated for governing bodies of health planning agencies--with some special additions. The National Health Planning and Resources Development Act sets forth the following requirements for such bodies in health systems agencies:

> *A majority (but not more than 60 percentum of the members) shall be residents of the health service area...who are consumers of health care...broadly representative of the social, economic, linguistic and racial populations, geographic areas..., and major purchasers of health care.*
>
> *The remainder of the members shall be residents...who are providers of health care and who represent (1) physicians (particularly practicing physicians), dentists, nurses, and other health professionals; (2) health care institutions (particularly hospitals, long-term care facilities, and health maintenance organizations); (3) health care insurers; (4) health professional schools; and (5) the allied health professions.*
>
> *The membership shall: (1) include...public elected officials and other representatives of governmental authorities...and representatives of public and private agencies...concerned with health; (2) ...individuals who reside in nonmetropolitan areas...;*[41]

It would also be desirable to involve representatives of: persons who have experienced various levels of health and disability, and various health-related practices; boards of public and private education agencies; other human service agencies; civic, religious, and social groups; employers and labor organizations; health education specialists; school teachers and administrators; adult educators, nutritionists, and agricultural extension workers; environmentalists and safety specialists; community organizers, outreach workers, counselors, and social service specialists;

communications media personnel; physical education and recreation specialists; psychologists, sociologists, and anthropologists; health and education professional associations; and community councils.

Such groups should be considered for representation in health education planning at state, area, and local levels. Some criteria that may be used in selecting participants are:

* Extent to which they are respected by their constituents;

* Ability to help pull various interests together for joint action on community priorities;

* Interest in health education.

Methods

DHEW performance standards guidelines state:

> *The HSA should strive to develop the broadest possible involvement and participation by affected groups and individuals in the agency's planning and implementation activities, with particular attention given to the public-at-large, and groups not represented on the HSA governing body. The HSA should provide for public involvement and participation in its affairs through a variety of formal and informal mechanisms, including: public hearings and public meetings; exchange of written communications; direct contact and exchange of views and positions through agency staff and/or members of the governing body, committees, subarea advisory councils, task forces, etc. The public and various interested or affected groups must be provided advance information on HSA activities, and meetings of the organizational components of the agency must be accessible to the public.*[51]

Other methods of involving people may also be useful:

* Informal discussions of health needs and interests by small groups in various neighborhoods;

* Questionnaire surveys;

* Structured or open-ended interviews of representative persons (e.g., by outreach workers or volunteers);

* Submitting written comments on drafts of proposed plan elements.

Group discussions can be especially effective. They offer opportunities for people to build creatively on each other's ideas--and on ideas obtained from many others through surveys or forums. Such discussions, whether at meetings of committees or informal groups, can also spark enthusiasm and momentum leading to action. Groups of about five to ten persons seem to be most productive. They are large enough to bring various viewpoints into play, but small enough to permit an informal atmosphere and significant participation by each member.

Groups are usually more successful if they spend some time allowing members to become acquainted with each other before getting down to work. It is also important to establish a climate that encourages full participation--e.g., by making it clear that rejection of an idea does not mean rejection of the person who suggests it.

Most group-work experts feel it is better for small groups to reach decisions by consensus--i.e., general agreement after everyone has had a chance to comment and mesh ideas--than by using Robert's Rules of Order. The consensus approach is more likely to produce informality, cooperative creativity, and real involvement. Some persons prefer this method for larger groups as well.

Discussion leaders should have group-work skills. This is more important than having knowledge about health or health education. Specialists on certain subjects may be brought in (usually on a temporary basis) to serve as resource persons for a group that wants this kind of assistance.

Roles and Relationships

Each member of a committee or task force should have a written statement of the group's specific responsibilities and its relationships to other groups. Participants should have a chance to ask questions about their assigned task, and to change it if necessary. Duties of staff in serving committees must be known from the outset.

Volunteers should have opportunities to initiate ideas and make significant decisions rather than just react to staff proposals. One agency, for example, follows the policy of holding meetings only when three or more decisions have to be made.

Preparation

All members of health education planning committees or task forces should receive orientation and training about health, education, planning, and group-work before making decisions or taking actions. Resources for providing this preparation are usually available from educational institutions, health agencies, planning agencies, industry, retired persons, or other sources.

PLANNING FRAMEWORK

Process

Planning is much the same for health education as for other fields.

In a thorough review of many references, William J. Waters identified five "generic or fundamental steps of the planning process"--

1. *Task Design* (*What are we about?*)
2. *System Investigation* (*Where are we? How did we get here? Where are we headed?*)
3. *Ends Establishment* (*Where do we want to go?*)
4. *Means Selection* (*How do we get there?*)
5. *Intervention Evaluation* (*Did we get there?*)[52]

Dr. Herbert H. Hyman discusses eight health planning methods: systems analysis, operations research, cost-benefit/cost-effectiveness analysis, intuitive forecasting, information systems and health indicators, ad hoc opportunism, policy analysis, and community organization. He says the first five, which are technically oriented, generally produce strong diagnoses but weak implementation. The last three, which he calls humanistic-politically oriented, are weak on diagnosis but relatively strong on implementation.[53]

Dr. Hyman also indicates that problem-solving approaches to planning are likely to be conservative and reactive, focus heavily on feasibility and efficiency of methods, and relate largely to narrow vested interests. Approaches that start with goals, on the other hand, are more likely to result in innovations and action, show more concern for effectiveness, and relate to comprehensive system-wide change.[53]

Dr. Henrik L. Blum combines goal-oriented and problem-solving approaches to health planning. He says that while this country was founded on the basis of long-range goal-setting, there is now a great reluctance to engage in this type of planning. He declares health agencies are usually forced to approach planning by solving obvious and pressing problems. In his dual approach, Dr. Blum calls for an "articulated (or systems-oriented) problem-solving mode which is guided by the long-range goals..."[2]

Dr. Harold W. Demone, Jr. warns of possible pitfalls if planning decisions are based solely on rational means-ends planning models. He says:

> *Whatever the humanitarian or technical recommendations, the final decision is going to be a political one...This is the world we find ourselves in. In a sense, I am encouraging reality testing and suggesting that we can better cope with non-rational factors if we acknowledge their existence.*[54]

One health education specialist, after field-testing ideas in the mid-1950s, developed "Steps in Health Education Planning, Operation, and Evaluation." This model starts with general goal-setting, which Dr. Hyman says fosters innovations, effectiveness, and comprehensiveness. It also incorporates a feature which takes into account the non-rational political factors mentioned by Dr. Demone. This feature is identification and analysis of positive and negative forces at work. (Effective involvement of persons representing various interests, too, should reduce detrimental effects of non-rational factors.)

Following is an outline of this suggested approach to health education program development:

*A. Set Goals**

Related to:

1. *Health status;*
2. *Personal (individual and community) action;*
3. *Health education practices;*
4. *Health education resources.*

---

* DHEW guidelines for health planning call for a narrower definition of goals. This is discussed in the chapter on "Setting Goals."

B. *Define Problems*

1. *Determine health status gaps and trends caused by personal actions;*
2. *Determine gaps and trends in personal (individual and community) health actions;*
3. *Determine characteristics of affected persons, and trends in these characteristics;*
4. *Determine positive and negative forces affecting personal (individual and community) health actions;*
5. *Determine gaps, trends, and forces regarding health education practices;*
6. *Determine gaps, trends, and forces regarding health education resources;*
7. *Determine aspects of problems that should be tackled --regarding health, action, education, resources, and forces.*

C. *Design Plans*

1. *List alternative approaches for dealing with problems and moving toward goals;*
2. *Analyze pros and cons of alternatives in relation to specific criteria;*
3. *Select tentative approach;*
4. *Pretest and revise approach;*
5. *Set specific operational objectives;*
6. *Define specific subobjectives, activities, timetable, and resources;*
7. *Pretest and revise plans;*
8. *Develop specific evaluation procedures;*
9. *Obtain approvals of plans and commitments of resources.*

D. *Conduct Activities*

1. *Obtain needed funds;*
2. *Obtain needed staff, volunteers, committees, and consultants;*
3. *Define specific duties and relationships;*
4. *Obtain needed facilities, equipment, supplies, and services;*
5. *Develop management policies and procedures;*
6. *Implement plans.*

E. Evaluate Results

1. *Determine extent to which subobjectives and objectives have been achieved;*
2. *Determine extent to which activities were carried out and resources used as planned;*
3. *Determine relationships between achievement of objectives, carrying out of activities, and use of resources;*
4. *Determine strengths and weaknesses of program development processes;*
5. *Determine favorable and unfavorable byproducts;*
6. *Review importance of this program compared with others;*
7. *Decide whether or not to continue; if so, recommend ways to improve program.*[55]

Program development efforts seldom proceed this neatly. Each phase, for example, may bring insights that lead to changes in previous decisions--what the astronauts would call "mid-course corrections." As in any creative endeavor, there are likely to be many detours. A single group discussion, for example, may jump rapidly back and forth between problems, goals, methods, and evaluation. The above outline, though, or another logical sequence of steps, can be helpful in the same way a map can be helpful--in keeping track of present location and assuring progress toward the desired destination. Each cycle of planning steps provides information and experience that feed into decision-making for the next cycle.

The accompanying chart (Figure 1) shows how key health education planning components mentioned in the above outline relate to each other. For each of the four items listed vertically in the left column (health, actions, health education practices, and health education resources), it is important to identify people concerned and their goals. Then gaps may be determined by comparing facts about current and projected status (assuming no program changes) with the decisions about goals (or desired status). Analysis of forces at work will indicate causes of the gaps, barriers that may hinder movement from current status toward goals, and factors that may facilitate such movement. This same matrix can be used to visualize relationships between data obtained for either problem definition or for evaluation.[55]

The concepts presented in the foregoing outline and in the chart are consistent in most respects with standards called for in P.L. 93-641, the National Health Planning and Resources Development Act, and related guidelines. Following are highlights (not exact quotes) from statements in the law[41] and

Figure 1

HEALTH EDUCATION PLANNING COMPONENTS AND THEIR RELATIONSHIPS

	People	Positive Forces	Current Status	Negative Forces	Goals
Health	All persons in community, or selected population groups • Characteristics • Trends	**Heredity** **Physical environment** **Social conditions** **Health services** **Personal actions**	Current health status: Degree of well-being Preventable disability and premature death caused by personal actions • Costs • Trends	**Heredity** **Physical environment** **Social conditions** **Health services** **Personal actions**	Vigorous well-being Reduction in preventable disability Reduction or delay in premature death
Action	All persons, but especially those having high risk • Characteristics • Trends	**Values** **Goals** **Interests** **Pleasures** **Fears** **Attitudes** **Beliefs** **Perceptions** **Understanding** **Skills** **Habits** **Experiences** **Involvement** **Convenience** **Comfort** **Compatibility** **Confidence** **Complexity** **Cost** **Timing** **Availability** **Policies** **Laws** **Technology** **Environment**	Current personal health practices • Gaps • Trends	**Values** **Goals** **Interests** **Pleasures** **Fears** **Attitudes** **Beliefs** **Perceptions** **Understanding** **Skills** **Habits** **Experiences** **Involvement** **Convenience** **Comfort** **Compatability** **Confidence** **Complexity** **Cost** **Timing** **Availability** **Policies** **Laws** **Technology** **Environment**	Personal practices that promote vigorous well-being and prevent unnecessary disability and death
	Persons needing health services • Characteristics • Trends		Current use of health services • Gaps • Trends		Prompt use of appropriate health services when needed
	Persons who have been given medical advice • Characteristics • Trends		Current following of medical advice • Gaps • Trends		Carrying out of prescribed diagnostic, treatment, and rehabilitation procedures
	Representatives of all groups affected, and persons who have needed skills • Characteristics • Trends		Current participation in health program development • Gaps • Trends		Broad, effective participation in health program development
Education	Educational specialists Providers of service Patients and ex-patients Patients' families Informal counselors Opinion leaders Communications media • Characteristics • Trends		Current health education practices • Costs • Gaps • Trends		Effective, efficient, appropriate application of what is known about how people learn
Resources	Agency administrators Advisory committees Community leaders Business, industry, labor Civic organizations Legislators Foundations Education consultants Behavioral scientists • Characteristics • Trends		Current health education financing, manpower, facilities, equipment, supplies, technical assistance, legislation • Costs • Gaps • Trends		Availability of needed health education resources: Adequate financing; Appropriate quantity, preparation, distribution, and use of needed manpower Adequate facilities, equipment, and supplies Adequate technical assistance Adequate legislation

guidelines[56,57] concerning functions of areawide and state health planning agencies:

- *Assemble and analyze data concerning health status, the health care delivery system, effect of the system, resources, use of resources, and environmental and occupational exposure factors;*
- *Establish health plans that include long-range goals, objectives, recommended actions, and resource requirements;*
- *Implement the plans--to the extent practicable, with sponsorship by other appropriate individuals and public and private entities;*
- *Coordinate activities with those of other appropriate entities;*
- *Provide opportunities for the public to obtain information about the agency and its operations and to participate in agency activities.*

Structure

To guide the planning and carrying out of public education activities, each health planning agency needs to consider what kind of structure would be most helpful. A key issue here is whether health education should be developed on an integrated or separate basis, or both. Just about everyone seems to agree all elements of the health plan that require decision-making and action by the public should include appropriate educational components. But there are strong arguments for also having a separate public education element.

One of the main deficiencies of health education across the country is its fragmentation. Each categorical health program, whether conducted by an independent agency (e.g., a disease-oriented or special-service voluntary agency) or by a division of a large general health agency (e.g., a health department) tends to develop its own health education activities. These often duplicate and conflict with each other--and leave many important aspects of health education uncovered. Some health departments have found that a separate office of health education serves as a useful focal point for comprehensive, coordinated program development--as well as for upgrading the quality of public education in the categorical programs. Likewise, a few communities have established health education centers to help pull together and increase the effectiveness of the diverse health education efforts of many different organizations.

A separate health education element in a health plan could serve the same types of purposes as separate health education offices or centers--i.e., comprehensive, coordinated, quality program development. Health planning agencies, therefore, should consider including a Public Education Committee in their structure. This group could:

1. Advise concerning the agency's direct public education responsibilities; e.g.,
    a. Informing the public about the National Health Planning and Resources Development Act and the agency's organization and operations;
    b. Developing policies and procedures for making the agency's records, reports, procedures, data, and decisions readily accessible to the public;
    c. Developing policies and procedures for encouraging extensive public participation in the agency's decision-making processes.
2. Advise concerning orientation and training activities for members of the agency's governing body and committees;
3. Develop the public education element of the agency's plans and advise other committees concerning the educational aspects of their plan elements; (The latter may be accomplished by having some Public Education Committee members attend meetings of other committees and/or by having the entire Public Education Committee review early drafts of other committees' plans.);
4. Advise concerning the agency's activities in encouraging other organizations to implement the public education components of the health plans.

The Public Education Committee may find subcommittees and/or task forces useful for more concentrated work on different parts of their responsibilities. These subgroups could be classified in various ways; e.g., according to:

Committee Functions

Public Information

Training

Plan Development

Plan Implementation

Program Development Phases

Problem Definition

Goal Setting

Plan Design

Program Operation

Program Evaluation

Action Categories

Personal Practices

Use of Services

Carrying Out of Needed Treatment (or Patient Education)

Community Health Program Development (or Community Involvement)

Settings

Schools and Colleges

Health and Medical Care Agencies

Other Human Service Agencies

Civic, Religious, and Social Organizations

Workplaces

Communications Media

One way of combining some of the above is to establish the following three subcommittees, with indicated functions (any of which could be handled either by a task force or by the entire subcommittee):

Agency Operations Subcommittee

Public Information

Training

Planning and Implementation Subcommittee

Personal Practices

Use of Services

Treatment (Patient Education)

Community Involvement

Data and Evaluation Subcommittee

Data Collection and Analysis

Evaluation

For each of the four functions under the Planning and Implementation Subcommittee, consideration would be given to goals, appropriate population groups, needs and interests, objectives, settings, recommended actions, resources, implementation commitments, technical assistance, grants, reviews, etc.

One advantage this approach to subcommittee organization for planning and implementation has over a classification by settings is that it encourages comprehensive, coordinated consideration of these four substantive areas among all settings. At a later stage in program development, task forces could be set up for certain settings (e.g., schools) to ensure an effective, coherent program for each setting.

Representatives of the Data and Evaluation Subcommittee may want to attend meetings of the other health education subcommittees, as well as other data and evaluation committees of the agency, to coordinate activities and make them relevant to priority needs and interests.

Regardless of how the work is divided, the Public Education Committee as a whole should take responsibility for pulling it all together into a comprehensive, coordinated program.

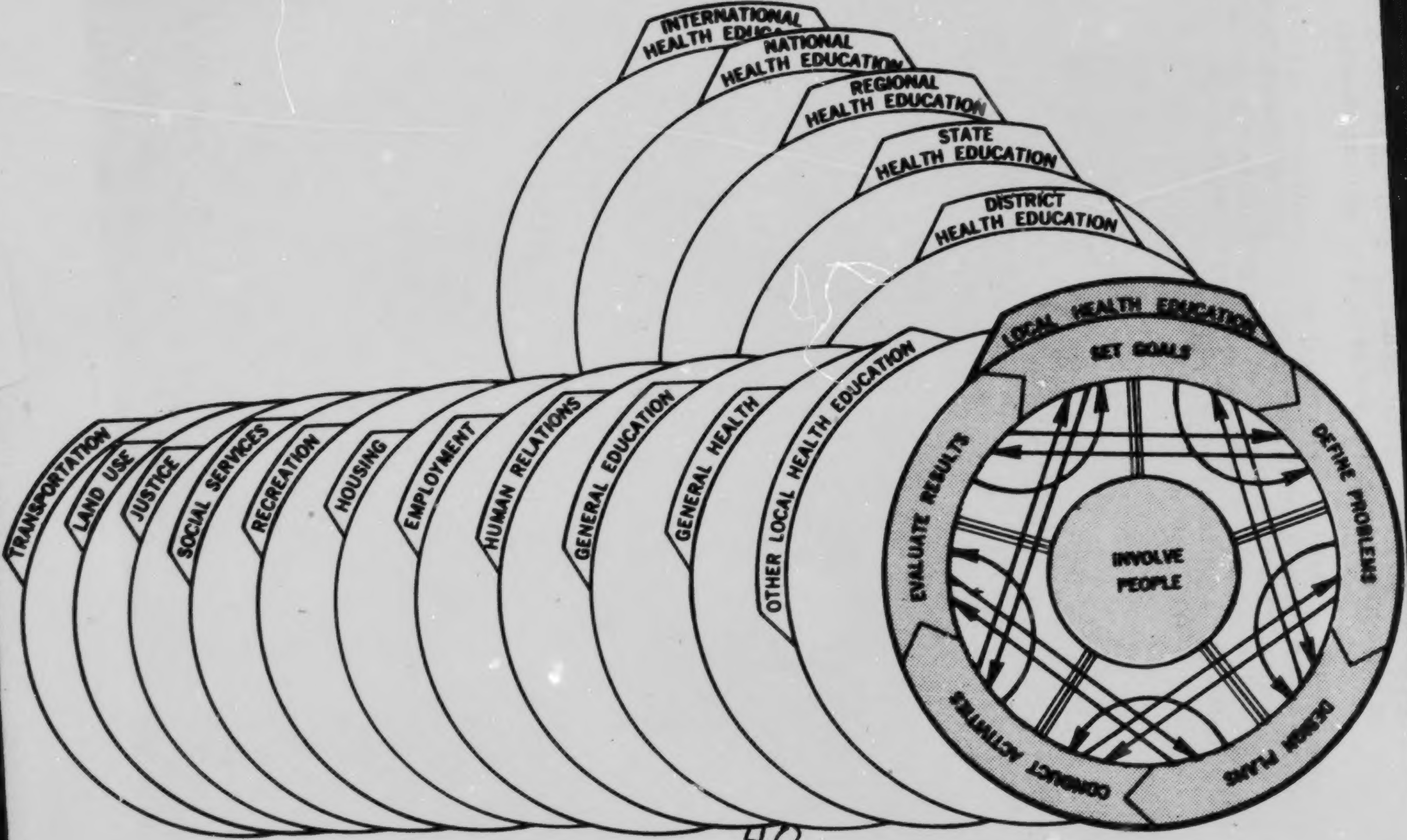
The agency may decide to have one committee handle both public and professional education. In this case, the name should be different (e.g., Education Committee) and the subcommittee structure should probably cover such additional areas as planning for basic preparation and continuing education of all types of health personnel, and training of the agency's staff.

Linkages between the various health education committees or task forces, between these groups and the agency's other committees, and between the agency and other agencies must be clear. This includes horizontal (same geographical domain) as well as vertical (e.g., local-area-state-regional-national) relationships. It is usually desirable to develop written agreements covering cooperative arrangements.

Figure 2 depicts the need to coordinate with related programs at the same and at other levels, the importance of involving people at every stage of program development, and the dynamic nature of the planning process--which generally follows repeated circular paths, but with a lot of back-and-forth movement along the way.[55]

Figure 2

DYNAMIC LINKAGES IN HEALTH EDUCATION


INTERNATIONAL HEALTH EDUCATION
NATIONAL HEALTH EDUCATION
REGIONAL HEALTH EDUCATION
STATE HEALTH EDUCATION
DISTRICT HEALTH EDUCATION
LOCAL HEALTH EDUCATION
SET GOALS
DEFINE PROBLEMS
DESIGN PLANS
CONDUCT ACTIVITIES
EVALUATE RESULTS
INVOLVE PEOPLE
TRANSPORTATION
LAND USE
JUSTICE
SOCIAL SERVICES
RECREATION
HOUSING
EMPLOYMENT
HUMAN RELATIONS
GENERAL EDUCATION
GENERAL HEALTH
OTHER LOCAL HEALTH EDUCATION

IV. DEFINING PROBLEMS

Just as good doctors diagnose ailments before prescribing treatments, so good planners define problems before recommending actions. The word "problem" is used here as "a question raised for inquiry, consideration, or solution."[58] It is seen as including opportunities as well as needs.

Some planning models call for setting goals before defining problems. This would encourage comprehensive coverage and help bring forth new ideas that may not emerge from study of the present situation. Actually, though, goal setting and problem definition probably should proceed simultaneously to some extent. Goals--at least in general terms--help determine kinds of analysis needed, but data help make goals more precise. Anyway, this chapter on problem definition is placed before the one on goal setting to be consistent with the sequence followed in the federal health planning law and guidelines.

The major criterion in selecting data to collect and analyze is: The extent to which the data will help guide decisions about planning, implementation, and evaluation. This seems obvious, but data collection and analysis are often treated almost as ends in themselves. Plan documents sometimes display detailed data sections which are not used at all in making decisions. This, of course, is wasted effort.

STEPS

Item B on Page 25 lists kinds of analysis that may be useful in health education program development. The relationships involved within and between the seven proposed categories may be visualized by referring to Figure 1 on Page 27.

The first of these problem-definition steps is:

1. Determine health status gaps and trends caused by personal (individual and community) actions

This is based partly on comparison between the current (and projected) status and goal (or desired status) columns of the health level in Figure 1. Data should cover all residents of the area served. This kind of analysis requires some prior agreement, at least in a general way, by the people in the area about what they consider desired health status. For example, is it just freedom from disease, disability, and premature death? Or is it also vigor, reserve capacity, and freedom from conditions (such as overweight) that are associated with disease? If health is defined in wellness terms, problems would include not just negative states (illness or disability) but also degree of robustness and ability to function at a high level.

Reliable data on health status gaps in a particular area are generally difficult to obtain. Registries are sometimes kept on certain diseases, but these are often incomplete. Local surveys may be conducted, but they take a lot of time and money. Leading causes of death by age and sex groups, though, should be available from state or local health departments.

National statistics may be used by adjusting them to fit local population characteristics. The DHEW National Center for Health Statistics, for example, has published many reports based on its regularly conducted National Health Interview Survey and National Health Examination Survey. Types of information provided include: degree of disability (restricted activity days, bed disability days, and work-loss or school-loss days) by age, sex, race, and income groups; prevalence of such conditions as nutrition deficiencies, dental defects, and heart disease; and distribution of physiological findings (e.g., blood pressure, cholesterol levels, visual acuity, and hearing) among various population groups. The Center has developed synthetic estimates which apply national rates to corresponding population groups in states or regions. It should be noted that these provide only rough estimates. Sources of national data on health status are discussed in two NCHS publications.[59,60]

Priority death risks faced by individuals or population groups may be estimated from periodically updated tables available from the Health Hazard Appraisal Program.[61] The probability of dying in the next ten years from ten or more leading causes is shown for white or black males or females in each five-year age group. By presenting figures for different years, the tables indicate some trends (e.g., an increase in risk of dying from lung cancer and decrease from cancer of the cervix). The major mortality risks of a particular population, therefore, could be determined by relating these tables to the characteristics of that population.

Once the existing or prospective health status gaps have been identified, those caused entirely or partly by personal actions should be determined. This involves review of available research findings, and/or judgments by medical or public health specialists.

Health status gaps related to deficiencies in the physical environment, social environment, and health and medical care services should also be identified. This step (which would undoubtedly be carried out in connection with other aspects of health planning) sets the stage for citizen participation in community health program development or in efforts to influence legislation and action at state and/or national levels.

2. Determine gaps and trends in personal (individual and community) health actions

This is another comparison between current/projected status and goals (or desired status), but this time at the action level of Figure 1. The analysis should be carried out for each of the four types of action set forth in the definition of health education:

- Personal practices aimed at promoting vigorous well-being, preventing avoidable disability and premature death, and effectively handling minor diseases and discomforts;
- Prompt, appropriate use of health services when needed;
- Selection and carrying out of needed diagnostic, treatment, habilitation, rehabilitation, and maintenance procedures; and
- Involvement in community efforts (at local, area, state, regional, national and/or international levels) to develop effective, efficient, appropriate environmental programs, socioeconomic measures, and health services systems that facilitate health improvement.

The statements of desired status of health actions in these categories should reflect both the values held by people in the area and knowledge about health. This points up the need for involvement of both health specialists and various parts of the population in determining desired health-related actions. Such involvement should occur not only by representative persons in developing a plan document but also by persons affected when specific educational endeavors are contemplated.

Data on current and projected actions as they relate to desired status may be collected through direct studies or application of national data. The previously mentioned

Health Hazard Appraisal system, for example, provides for identification of an individual's present practices (such as smoking, drinking, exercise, and use of seat belts) that are associated with his or her highest mortality risks.[62] Estimates can also be made of the amount of risk reduction that would result if specific behavior changes take place.[62] If such analyses are carried out with a sample of the population served by the health planning agency, the prevalence and trends of gaps in critical personal health actions can be determined.

Other studies could be directed at self-care of minor ailments, use of health services, carrying out of treatment, and participation in community health program development. Data obtained in national or other studies of health practices are available from governmental and private agencies specializing in various categorical programs (e.g., smoking, alcoholism, physical fitness, high blood pressure, heart disease, cancer, dental hygiene, safety, parenting, family planning, etc.).

3. Determine characteristics of affected persons, and trends in these characteristics

It is helpful to know what population groups have the greatest gaps in personal actions related to actual or potential shortcomings in health status. Differences in gaps may be tied to such characteristics as age, sex, income, education, cultural group, and/or residence. This makes it easier to offer special assistance to persons who have the greatest risk of health problems that can be prevented or reduced through personal behavior.

Data on trends are also useful here. If smoking rates are increasing among teen-age girls, for example, but decreasing among other population groups, this could affect decisions about priorities.

4. Determine positive and negative forces affecting personal (individual and community) health actions

Many health education programs appear to be based on the assumption that people fail to take recommended health actions only because they don't know about them. Studies show, however, that persons who smoke, use drugs, and otherwise fail to take recommended actions often know more than those who do what is considered healthful.

Many forces may cause gaps in actions or serve as barriers against moving actions from current status toward desired status. Other forces in these same categories tend to support favorable change. If these opposing factors and their causes and effects are known, dynamic educational and supportive activities can help people strengthen and build on the positive ones and weaken or get around the negative ones.

Figure 1 lists some of the types of forces that may be analyzed in this important aspect of problem definition. Perhaps the most important force is what people really want to accomplish for themselves as far as health is concerned--or what other values or goals they have which may require good health to achieve.

Review of literature on factors affecting health behavior may provide additional leads for kinds of data to seek.

Some behavioral scientists, for example, suggest that a health belief model may serve as a basis for determining types of data to collect and analyze.[63] This model declares that an individual is most likely to take an action to avoid a disease if he believes he is susceptible, believes the disease would have serious consequences for him, and believes the recommended action would reduce susceptibility and/or seriousness without being too inconvenient, expensive, unpleasant, painful, or upsetting. Some investigators have also incorporated factors that affect people's views of susceptibility and seriousness, as well as factors that serve as cues or triggers to action. Surveys of people's health beliefs and factors that affect them, therefore, could be the focus of forces analysis for health education.

A process of diffusion and adoption of innovations is documented in a review of 500 publications (pertaining to agriculture, medicine, education, and other fields).[45] This process has five phases: awareness, interest, evaluation, trial, and adoption. Research has determined which educational methods are most effective at each stage, characteristics of early and late adopters, the importance of opinion leaders, and the roles of persons who facilitate the process. Health planners using this model could obtain data about the current status of awareness, interest, evaluation, and trial related to certain health practices among a particular population since these have been identified as important forces in bringing about adoption of new practices.

A review of more than 4,000 publications concerning knowledge dissemination and utilization identifies three general categories of factors affecting action: research, development, and diffusion (RDD); social interaction (SI); and problem solving (PS).[64] RDD features a rational sequence involving mass production and packaging and planned mass dissemination activities. It is based on an assumption of a "passive consumer who will accept the innovation if it is delivered on the right channel, in the right way, and at the right time." The SI approach stresses the social relations network, the consumer's position in the network, informal personal contact, the individual's group identity and loyalty, and different stages in the adoption process (as in the preceding paragraph). The PS method starts with the consumer's needs, diagnosing before identifying solutions, keeping the outsider's role catalytic and non-directive, stressing use of internal resources, and facilitating consumer initiation of change. The author of this review brings these three perspectives together into a proposed concept of linkage. This model starts with the internal problem-solving cycle of the consumer, but calls for the consumer to enter into a reciprocal relationship with outside resources. The resource persons should simulate the consumer's needs, search activities, and solution procedures; and the consumer should be helped to understand and appreciate such processes as scientific evaluation. This collaboration is intended to build an effective trusting relationship, with mutual feedback. Again, the choice of program-development model would affect the types of data on forces to be collected and analyzed.

Another publication summarizes scales and indices that have been used in studies of forces affecting: preventive health behavior, health orientations, illness behavior, utilization of health services, and health status.[65]

Specialists in health education, psychology, sociology, or anthropology can be especially helpful in developing surveys, forums, or other means of determining forces that affect personal health actions in a particular area.

5. Determine gaps, trends, and forces regarding health education practices

Health education activities and services already being provided should be identified and analyzed. All settings should be covered (e.g., schools, colleges, and adult education programs; health and medical care agencies; agricultural extension services; other human service agencies; environmental organizations; safety groups; insurance companies; civic, religious, and social organizations; workplaces; communications media; and organizations concerned with general community planning and action).

Among health and medical care agencies, educational components may be found in any of the various types of services listed in the DHEW taxonomy: community health promotion and protection, prevention and detection, diagnosis and treatment, habilitation and rehabilitation, maintenance, and support. Also in the various service settings: community, home, mobile, ambulatory, short-stay, long-stay, and free-standing support.[56]

As suggested in DHEW guidelines concerning all health services, health education services may be analyzed in terms of the following characteristics: availability, accessibility, continuity, acceptability, quality, and cost. The guidelines say cost should receive special emphasis.[56]

Consumers as well as providers of health education services should take part in setting standards of practice (the goals or desired status column of the education level in Figure 1). These standards can serve as a guide for the kinds of data to collect and as benchmarks in analyzing performance. Consideration should be given to effectiveness, efficiency, and appropriateness of activities in applying what is known about how people learn and in reaching population groups of the area. The health education program-development scorecard presented on Pages 94-104 of this guide summarizes key criteria that may be used in assessing the quality of health education practices.

The following standards pertaining to health education practice have been proposed by DHEW (in guidelines called for in the National Health Planning and Resources Development Act):

A. *Standards for Educating the Individual in Healthful Behavior*

- *A comprehensive, coordinated and identifiable health education and promotion program component, as well as explicit health education and promotion segments of categorical programs shall be included in health or education plans of local and state health departments, school districts, the health systems agency, the state health planning and resources development agency, and federal and other appropriate health agencies at area and state levels.*

- *Health education and promotion services shall be equitably distributed throughout the health services area, and shall be accessible to all communities within the area, including traditionally underserved populations such as those located in rural or economically depressed areas.*

B. *Standards for Education Within the Health Care System*

- *Identifiable patient and family health education and promotion programs shall be available in hospitals having 150 or more beds, health maintenance organizations with 25,000 or more enrollees and federally-funded health care programs serving more than 5,000 persons.*

- *Agencies and organizations that administer federally-funded health care programs shall effectively inform persons eligible for services of their eligibility, and providers eligible for reimbursement of that fact. These efforts shall be evaluated periodically.*

- *An organized patient advocacy system shall be established in the health services area to assist in interpreting the nature and scope of available services to potential users, hear the grievances of users of these services concerning their quality, and represent the consumer in making suggestions about improving such services.*

C. *Standards for Education for Citizen Participation*

- *Health systems agencies and other agencies involved in health education and promotion planning, resources development and services operation, shall use indirect as well as direct means of obtaining significant citizen input and participation in programs and services.*

- *The health systems agency and its state and national counterparts shall provide or arrange for ongoing orientation and training of the agency's governing body, plan development committees, task forces, and other appropriate citizen groups. Such training shall include the need for and models of health programs, decision-making and policy development, as well as citizen opportunities, roles, and responsibilities in the formulation and assessment of health policies and programs; other health agencies shall be encouraged to provide similar orientation and training for their citizen participants.*[66]

Comparison of data on current health education practices against these standards (or similar ones developed by the health planning agency) could identify major deficiencies in health education practice.

Besides taking a snapshot of present health education practices, it is helpful to develop a motion picture of trends in these practices. This would include a history of past practices and especially a projection of future practices (assuming no program changes) according to best estimates. The projection should allow for assumed changes in such factors as population characteristics, living conditions, technology, economy, environment, and organization and financing of health services. Knowing the direction health education practices are already heading can facilitate sound decisions for planned changes.

Data on positive and negative forces affecting health education practices can lead to specific strategies of helping people who want to improve their health education performance. The types of forces listed in Figure 1--as they apply to persons who educate about health--suggest areas for data collection and analysis. Some of the most critical forces affecting health education are deficiencies in resources. Practically every committee that has studied health education for the last thirty years has agreed that among the most significant barriers to quality performance are: (1) the weakness of educational and human relations skills among many health personnel who come in contact with the public, (2) the lack of health preparation among teachers of health in schools, and (3) the shortage of qualified health education specialists.

6. Determine gaps, trends, and forces regarding health education resources

Referring again to Figure 1, the current (and projected) status column should be compared with the goals or desired status column at the resources level. Attention is focused here on financing, personnel, organizational arrangements, facilities, equipment, supplies, technical assistance, and legislation.

The health planning agency may find it useful to inventory currently available and projected resources in these categories. Personnel studied should include health education specialists (showing education, duties, agency, etc.), and others with training or primary responsibilities in health education (e.g., nurse educators, patient educators, outreach workers, etc.). Names of members of professional health education organizations residing in an area or state may be obtained from the organizations' directories.[67] Technical assistance data should include sources of consultation and continuing education relevant to health education.

Broadly representative local groups should determine desired status or standards concerning health education resources. Before making final decisions, they may want to review the following standards on health education resources proposed by DHEW (called for in Section 1501 of the National Health Planning and Resources Development Act):

A. *Standards for Educating the Individual in Health Behavior*

* *An organizational mechanism shall exist in the Health Services Area that will: Define the needs for health education and promotion programs, inventory resources and services available, and design a plan to develop, maintain and evaluate comprehensive health education and promotion programs in accordance with consumer needs and interests.*

* *Appropriate technical assistance and consultation services shall be available to assist in planning, implementation and evaluation of health education and promotion programs. This shall be provided by health systems agency, the state health planning and resources development agency, state health and education departments, centers for health planning, agencies of the U.S. Department of Health, Education, and Welfare and other consultative sources.*

* *Health education and promotion programs, under full-time professional direction and having adequate resources (personnel, materiel, funds and facilities) shall be located in: Health departments and federally funded health agencies serving 100,000 or more population, school districts having 10,000 or more students, and federal agencies having an identifiable employee health program.*

* *Health education and promotion staff shall include, to the maximum extent feasible, qualified persons who reflect the ethnic and racial backgrounds of the area; employers of health education and promotion staff shall follow affirmative action procedures for recruitment, training, and promotion.*

* *Appropriate educational institutions and other resources, such as funding sources, shall be encouraged to develop a hierarchy of preparation for health educators, including: Outreach workers, associate, bachelor's, master's and doctoral level personnel.*

* *Education resources preparing students for careers in health administration, teaching, community development and social work, as well as the medical, health and allied health professions, shall be encouraged to require at least one course in educational concepts and methodologies; continuing education and training courses in this subject shall also be encouraged.*

B. Standards for Education Within the Health Care System

* Patient and family education programs in hospitals having 150 or more beds, health maintenance organizations with 25,000 or more enrollees, and federally funded health programs serving more than 5,000 persons shall be under full-time professional direction and have adequate resources (personnel, materiel, funds and facilities).

* Facilities serving smaller numbers of persons than indicated in the previous item shall be encouraged to secure part-time professional health education specialists or other qualified personnel, or shall be urged to share the services of such individuals whenever feasible.

* Patient and family education resources (personnel, materiel, funds and facilities) shall be distributed within the health services area so that they are available to patients and their families receiving services at a health care facility identified under preceding standards.

* Appropriate technical assistance and consultation services shall be made available to assist in planning, implementation and evaluation of patient and family health education and promotion programs, with the help of the health systems agency, the state health planning and resources development agency, state health departments, centers for health planning, HEW and other consultative sources.

* Identifiable patient and family health education and promotion services shall be reimbursable by third-party payers.

* Educational institutions preparing students for careers in medicine, nursing, allied health professions and social work shall be encouraged to provide pre-service, continuing education and training in patient and family health education and promotion for all direct providers of personal health care.

C. Standards for Education for Citizen Participation

* An organizational mechanism shall exist within the health services area that will: Determine the availability, interests, and skills of citizens who are concerned with the successful resolution of health problems and issues at local, state and national levels; find ways of including these citizens in the agency's work; make their availability known to health agencies seeking citizen participation; and systematically encourage other citizens to become involved in various aspects of health at local, state and national levels.

- *Appropriate technical assistance and consultation services shall be made available to assist in planning, implementation and evaluation of citizen participation activities, with the help of the health systems agency, the state health planning and resources development agency, HEW and other consultative sources.*

- *Educational institutions shall be encouraged to provide continuing education and training for health professionals on ways and means of increasing informed citizen participation in formulating and assessing health policies and programs.*[66]

Definition of resources problems would evolve from assessing how well current and projected resources meet these standards (or others adopted by the agency), and what forces affect development of health education resources.

Health planning agencies interested in assessing the quality of programs for preparation of health education specialists may want to review two statements prepared by the Society for Public Health Education: "Guidelines for the Preparation and Practice of Professional Health Educators," and "Criteria and Guidelines for Baccalaureate Programs in Community Health Education."[68]

Despite the vigorous advocacy of health education by prestigious groups and individuals, and the specific mandates for it in the law and in regulations and guidelines, there are massive forces at work that hinder allocation of significant resources to health education and other promotional and preventive activities; e.g.,

- Policies of Medicare, Medicaid, and private insurers favor use of their many billions of dollars for medical care, especially expensive institutional care, rather than for health maintenance.

- The very high visibility, prestige, and many billions of dollars involved in medical care facilities and their sophisticated equipment provide an overwhelming incentive and power for placing high priority on expensive diagnostic and treatment procedures--or on their regulation--and low priority on public education.

7. Determine aspects of problems that should be tackled--regarding health, action, education, resources, and forces

Findings of the previous problem-definition steps should be reviewed to select areas that offer the greatest promise for favorable change. Priorities on needs and opportunities may be set most systematically and objectively if criteria are used in determining the relative significance of alternatives being considered. Examples of criteria are:

The extent to which--

...the public as well as personnel in health organizations and other affected groups are concerned or may become concerned about the problem;

...a large proportion of the population is likely to improve its health by substantial amounts or the health system would be improved in important ways if the problem is significantly reduced;

...public education and related supportive activities are likely to contribute to significant reduction of the problem;

...the probable costs of significantly reducing the problem through public education would be justified by the expected benefits;

...needed resources may be obtained;

...beneficial byproducts of significantly reducing the problem through public education would outweigh harmful byproducts.

Each criterion used may be weighted according to its relative value (e.g., on a scale of 5 to 1). A problem could be rated as meeting a criterion to a high, medium, low, or no degree (e.g., with scores of 5, 3, 1, or 0). The rating score multiplied by the weighted value would yield a total score for a problem in relation to a criterion. The sum of the total scores for all criteria divided by the number of criteria used would produce an individual rater's priority score for a particular problem. The average of such priority scores submitted by all raters could then be used in comparing the relative significance of each problem being considered.

Persons representing a broad range of interests should have opportunities to participate in this process of setting priorities on problems. They should be provided with background statements that include available facts and expert opinions pertaining to alternatives being considered.

This type of analysis may lead to concentration on problems in any or all categories depicted in Figure 1. For example:

* In an area where residents are very concerned about a particular health hazard (e.g., high blood pressure or

injuries from accidents), priority could focus on the selected problem, with its implications for individual and community actions, health education practices, resources, and related positive and negative forces;

- * Where certain people have urgent health desires, high risks, or promising opportunities (e.g., low-income groups or parents of first children), they could become the center of attention;

- * A committee in another area may decide to work on gaps in certain actions--such as eating, exercise, smoking, or alcoholism--that have serious multiple health consequences;

- * If many agencies are already carrying on separate public education activities, priority may be placed on uncertainty about their impact, or on fragmentation of effort, or on a lack of quality in health education practices;

- * The point of departure in areas with sparse health education resources might be the absence of an organizational mechanism to take responsibility for resource development;

- * Decision-makers in another area may choose to deal with substantial negative forces blocking effective health education program development--e.g., existing laws or regulations, lack of support among key groups, or prevailing strong incentives for unhealthful practices.

DEPTH

It could take years to collect and analyze all the types of data suggested above. If this course is followed, it may create a feeling that nothing practical is being accomplished. Enthusiasm of staff and volunteers could fade.

A planning group, therefore, could decide to select initially a few obvious problems for rapid analysis as a basis for prompt planning and implementation. This quick-and-dirty approach would be more likely to generate and maintain an esprit de corps, and establish the agency's credibility and visibility for getting things done. Meanwhile a system could be set up for more thorough problem definition on a long-term, continuing basis.

In either case, though, the steps described above (1-7), or similar ones, should be followed. A wide range of possibilities would be considered in both situations. Only the depth of analysis and the amount of time involved would vary.

EXAMPLES

Here is a summary of an initial quick-and-dirty approach to problem definition used in the early 1970s by a subarea agency* in Ventura County, California:

> *The broadly representative CHP/RMP governing body first established general health goals, then initiated the planning process with an orientation conference about health issues and planning methods for 125 persons. Some of these persons then helped the Community Council and CHP/RMP conduct health forums in ten communities. Hundreds of forum participants, representing all population groups, were organized into small discussion groups to talk about what they considered the most important health needs in their communities. Some of these discussions were conducted in Spanish.*
>
> *Mentioned most often were lack of public understanding about available health services, drug abuse, venereal disease, and nutrition; lack of availability of some services; inaccessibility of services; health manpower shortages; environmental hazards; and health-related social forces.*
>
> *As a followup to the health forums, eight communities organized local health committees, set priorities, and stimulated immediate action on selected problems. CHP/RMP task forces, the County Health Services Agency, schools, and other organizations tackled other problems that were amenable to fast action. The CHP/RMP Dental Task Force, for example, arranged for USC and UCLA dental and dental hygiene students to set up mobile clinics for children from low-income families.*
>
> *Meanwhile, countywide CHP/RMP committees, with assistance from many volunteer experts, reviewed the needs identified at forums, got information and ideas from appropriate specialists, then set tentative priorities and long-range and short-range goals. This was based on use of such criteria as amount of preventable disability and death, availability of knowledge and resources, and interests of consumers and providers. Alternative approaches for dealing with priority needs were considered, which led to*

---

* A combined Comprehensive Health Planning Association/Regional Medical Program.

> *some modifications in priorities. Then drafts of detailed plans were developed and sent to hundreds of persons for review--along with a priority rating sheet.*
>
> *Respondents gave top priority to: drug and alcohol abuse prevention, school health education, primary care accessibility, communication about available services, dental care, family planning education, transportation, and patient education. Among these and the other 23 program areas considered, health education received highest priority--in relation to services, facilities, environment, and manpower.*[69]

Following is a description of an exploratory program conducted in the mid-1950s in Sedgwick County, Kansas to "develop a common-sense approach to problem definition, seeking to avoid the hazards both of snap judgments and of long-term depth analyses":

> *In order to define the educational interests, needs, and resources pertaining to families having children with rheumatic fever histories, it was decided to get answers to the following questions:*
>
> 1. *What specific actions can these families take to protect themselves against rheumatic fever?*
> 2. *What actions do they take?*
> 3. *What forces hinder them from taking action and what forces help them?*
> 4. *What people can serve effectively as educators?*
> 5. *What educational activities are already being carried on?*
> 6. *What forces hinder the educators and what forces help them?*
>
> *It was felt the first three of these questions, especially, contain the basic elements of problem definition needed for intelligent program development. ...*
>
> *Interview questions grew out of the six information goals listed above. ... Primary focus of the interviews was specific family situations as seen by different people, rather than rheumatic fever in the abstract. When possible, for example, a parent, physician, and nurse were to be questioned about the same child.*
>
> *It was thought that a small number of interviews would be sufficient to provide useful leads for program development. A sociologist said even one interview could produce worthwhile information. Another consultant said a good way to determine size of sample in explorations of this kind is to interview only until no meaningful new*

information is obtained by additional interviews. While statistically significant conclusions could not be expected from a small study, it was thought that program decisions would be sounder if based on even a limited exploration of the objective situation than if based solely on the opinions of a few professional health workers, however expert they may be. ...

Interviews were completed on the following: twenty-two public health nurses, eleven physicians, eighteen parents, and one school principal. Hospital, school, and nursing records were studied when available. Information about 55 children with a history of rheumatic fever was obtained from one or more of the interview or record sources. A relatively complete picture was obtained regarding nine children, since information about them came both from the family and from professional health personnel.

The data obtained from each interview or record were classified according to the goals of the exploration. ... Case histories ...were developed to describe some of the families' problems. ... A summary of all interview findings was prepared. ...

Arrangements were made for analysis of findings by people directly concerned with problems of rheumatic fever. This was considered important both because of the ideas these people could contribute and because of the educational potential of this analytical process for those who would take part in it.

Among the findings considered by program planners as having implications for program development were the following:

* Great concern of parents in connection with diagnosis--accompanied by intense desire to learn about rheumatic fever;

* Dramatic differences between some medical recommendations and family actions, especially in relation to amount of activity child is allowed;

* Reluctance of parents to ask physicians about matters that worry them, feeling the physicians don't have time to talk about details;

* Use of relatives, friends, and publications as trusted sources of advice;

* Lack of knowledge by some public health nurses of physicians' recommendations to families;

* Long delay between acute illness and beginning of public health nursing service.

> *Discussion of these and other problems led to the setting of specific program goals, selection of educational methods, and provision of educational experiences. ...*
>
> *The process of problem definition itself had educational outcomes, because people were encouraged to think through for themselves the various dimensions of the problem and were provided with opportunities to participate in making decisions about solving it. (For example, a mother, one of the interviewees, who had not taken her two children having rheumatic fever histories to a doctor for three years despite worries about symptoms, got them under care again. Another mother stopped overprotecting her child after the physician and nurse contacted her about it. Public health nurses increased the number of persons with rheumatic fever they were seeing, and reduced the time between acute attacks and their first visits from many months to a few days. Nurses also took the initiative in developing new policies regarding rheumatic fever, set up their own inservice education program, obtained physicians' recommendations about their patients, and found out if parents were following these recommendations. One physician started using penicillin prophylaxis after receiving several telephone calls from nurses asking for his advice about prophylaxis. Another physician called a mother in for advice after learning in the interview that her child was not following the regime he had recommended. Representatives of the Medical Society decided, after reviewing exploratory results, that physicians needed some educational sessions on management of rheumatic fever.)*[70]

These examples show some ways of quickly, but systematically, analyzing an area's particular health education needs, interests, and resources.

DOCUMENTATION

Procedures should be adopted for documenting and organizing bits of evidence obtained for use in defining problems. In the Sedgwick County exploratory program, for example, this simple approach was followed:

* Place each item on a 3" by 5" or larger card;
* Label each card in the upper right-hand corner according to the relevant planning component in the matrix presented in Figure 1 (e.g., Action/ Current Status, Education/Negative Force, etc.);
* Show source and date of information at bottom of card;
* Organize cards under the planning component headings in a file box or on a large planning board.

Besides facilitating classification and analysis of data, this approach makes it easy to visualize gaps in data collection.

INVOLVEMENT

As illustrated in the Ventura County and Sedgwick County examples, significant involvement in collecting and analyzing data can lead not only to practical problem definition but also to understanding and commitment that may result in action.

V. SETTING GOALS

Goals provide a sense of direction for program development.

It may be useful first to state goals tentatively in general terms as a guide for problem definition, then revise them more precisely to meet needs and opportunities identified in the analysis of data. Goals may have to be amended again in later stages of program development.

DEFINITIONS AND STANDARDS

The health planning agency's Public Education Committee may want to establish a definition of goals, and standards for goal statements. The following material provides some ideas for consideration.

Health Goals

DHEW guidelines for areawide* health plans indicate that:

> *Goals are expressions of the desired conditions of health status and health systems expressed as quantifiable, timeless aspirations. Goals should be both technically and financially achievable, and responsive to community ideals. ... They... are not stated in terms of community or provider action.*[56]

What do these words mean?

The term, "desired conditions," means goals are intended states that are considered better than the present situation. They are expected results, ends, outcomes, or products--not methods, means, activities, or processes. "To take a bus to a certain place" is not a goal (unless the bus ride itself is the desired condition). "Being there" is. A goal answers the question "What?"--not "How?"

---

*Guidelines for state health plans have similar standards for goals.

"Health status" was discussed in Chapter III. DHEW defines "health systems" to include all factors that directly affect health status. That is, physical and social environment, personal behavior, health and medical care services, and heredity. Relationships between health status goals and health systems goals should be clear. Any statement that does not describe a proposed change in health status or in one or more of the factors that directly affect health status is not considered a health goal by DHEW. Upgrading air quality by a certain amount may be a goal, for example, but "community or provider action" to achieve that improvement should be called something else (e.g., a recommended action).

Goals are "technically and financially achievable" if knowledge and money are or will be sufficient for them to be reached. They are "responsive to community ideals" if they fit in with values of the area's residents. "Timeless" just means goal statements should not include time targets for their achievement.

Some planning standards see goals as broad statements of ideals, but DHEW calls for them to be "quantifiable." Various indicators may be used for this purpose. Health status goals, for instance, may incorporate such measurable factors as years lived or lost (or premature death rates), ability to function at certain levels (or disability), or other measures of well-being (or lack of it). The eight aspects of health status presented by Dr. Blum (Page 16 of this document) may suggest relevant indicators. Health service goals, DHEW says, may use indicators related to availability, accessibility, continuity, acceptability, quality, and cost.[56]

DHEW health planning guidelines state that levels of quantified targets may be:

> *...based on a comparison of one area's health status and systems performance with comparable data from similar planning areas, comparison of subgroups within the HSA's area, and the medical and professional state of the art as expressed by qualified experts.*[56]

To make goals quantifiable, another DHEW document[71] (not guidelines for health planning agencies) declares they should be specific and clear concerning:

> *1. Time;**

---

* As previously indicated, however, DHEW's guidelines concerning health plans call for goals that are "timeless."

2. *Direction of change;*

3. *The measure of the characteristic to be changed;*

4. *Magnitude of change; and*

5. *Definition of measure.*

The following example fits this model:

> *By 1973* to reduce infant mortality by 30 percent, from 19 to 15 deaths per 1,000 live births.*[71]

A study of 149 goal statements in comprehensive health plans found that 85 percent specified a direction of change, a slightly smaller proportion showed a measure of change, only about 25 percent indicated time or the measure used, and only 15 percent included a magnitude of change. Twelve goal statements, or 8 percent, met all five criteria.[71]

When adequate data are not available to specify quantitative levels related to an important input to health, DHEW guidelines allow goals to be developed in non-quantitative language --at least temporarily.[56]

The national health planning law, P.L. 93-641, and related guidelines call for health planning agencies' goals to:

> *Begin with the needs of the present and projected population rather than the needs of existing facilities and other resources;*
>
> *Be responsive to the unique needs and resources of the area served;*
>
> *Be consistent with the goals of other related areawide or state health planning agencies;*
>
> *Take into account federally mandated plans of state agencies in such areas as alcohol and drug abuse, mental health, nutrition, and maternal and child health;*
>
> *Consider the priorities set forth in Section 1502 of P.L. 93-641; and*
>
> *Be consistent with the national guidelines for health planning policy (issued under Section 1501 of P.L. 93-641).*[41]

---

* As previously indicated, however, DHEW's quidelines concerning health plans call for goals that are "timeless."

Health goals should also meet the following criteria, according to another DHEW document[71] (not guidelines for health plans):

> *Be relevant to the statutory mission;*
>
> *Address an important health issue;*
>
> *Be consistent with other health policy statements;*
>
> *Be susceptible to achievement through program action;*
>
> *Be potentially useful; and*
>
> *Exhibit a readiness for adoption.*

Educational Goals

Robert F. Mager, an expert on educational goals, believes an instructional objective* should describe an intended outcome in terms that indicate:

> *...what the learner will be DOING when demonstrating his achievement and how you will know when he is doing it.*[72]

He says "terminal behavior" (what the learner will be doing) may be described by following these steps:

> *a. Identify and name the overall behavior act;*
>
> *b. Define the important conditions under which the behavior is to occur...;*
>
> *c. Define the criterion of acceptable performance.*[72]

Mager would say that "To develop an understanding of _____" is not a behavior, but to be able to perform an activity that demonstrates understanding could be a behavior. Conditions under which a behavior is to occur might specify what the person would have available or not available to him, or what skills are to be or not to be developed. The criterion of acceptable performance would describe how well the person is to perform.

---

* Mager uses "objective" and "goal" to mean the same thing.

Health Education Goals

As a basis for applying the above guidelines in establishing health education goals, it may be helpful to consider the relationship of various aspects of health education program development to health goals and general values. This is depicted in Figure 3. The planning process moves roughly from top to bottom of this chart. This makes it possible to base decisions at each level of the hierarchy on potential impacts at higher levels. Program implementation, on the other hand, proceeds mainly from bottom to top--since achievement at each level generally requires prior achievement at lower levels.

According to DHEW guidelines, health goals should focus only on Level II, health status, and Level III, forces affecting health. As the chart indicates, personal health behavior--which is especially relevant to health education--spans two levels. It is a force that directly affects health (Level III), but by its very nature it is also action (Level IV). While the DHEW definition of a goal excludes "community and provider action," it does not exclude personal health behavior--because of the latter's direct influence on health status. Thus some health education goals should relate to personal health behavior.

As stated in the proposed definition on Page 18, health education is concerned with three types of personal health-related behavior:

1. Personal practices aimed at promoting vigorous well-being, preventing avoidable disability and premature death, and effectively handling minor diseases and discomforts;

2. Prompt, appropriate use of health services when needed; and

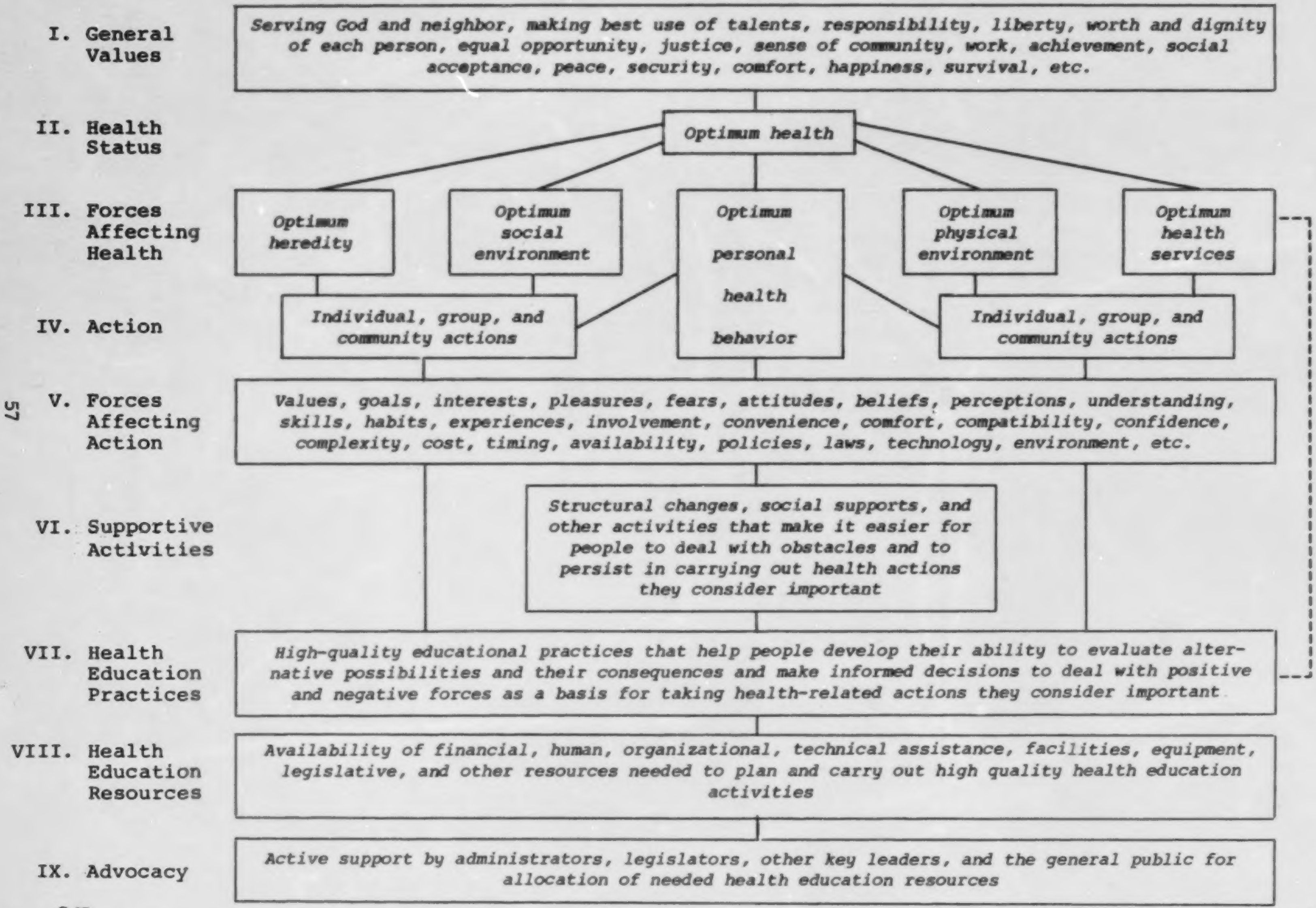
3. Selection and carrying out of needed diagnostic, treatment, habilitation, rehabilitation, and maintenance procedures.

Health education goals should cover all priority needs and opportunities identified in the problem-definition stage that relate to these three areas of personal action. Affected population groups should be indicated.

In some situations it may be considered more appropriate and effective to push for environmental modifications instead of asking people to contemplate behavioral changes (for example, developing a safe cigarette, installing air bags in automobiles, or controlling the sugar and fat content of food

Figure 3

RELATIONSHIP OF HEALTH EDUCATION PROGRAM DEVELOPMENT TO HEALTH GOALS AND GENERAL VALUES


I. General Values
Serving God and neighbor, making best use of talents, responsibility, liberty, worth and dignity of each person, equal opportunity, justice, sense of community, work, achievement, social acceptance, peace, security, comfort, happiness, survival, etc.
II. Health Status
Optimum health
III. Forces Affecting Health
Optimum heredity
Optimum social environment
Optimum personal health behavior
Optimum physical environment
Optimum health services
IV. Action
Individual, group, and community actions
Individual, group, and community actions
V. Forces Affecting Action
Values, goals, interests, pleasures, fears, attitudes, beliefs, perceptions, understanding, skills, habits, experiences, involvement, convenience, comfort, compatibility, confidence, complexity, cost, timing, availability, policies, laws, technology, environment, etc.
VI. Supportive Activities
Structural changes, social supports, and other activities that make it easier for people to deal with obstacles and to persist in carrying out health actions they consider important
VII. Health Education Practices
High-quality educational practices that help people develop their ability to evaluate alternative possibilities and their consequences and make informed decisions to deal with positive and negative forces as a basis for taking health-related actions they consider important
VIII. Health Education Resources
Availability of financial, human, organizational, technical assistance, facilities, equipment, legislative, and other resources needed to plan and carry out high quality health education activities
IX. Advocacy
Active support by administrators, legislators, other key leaders, and the general public for allocation of needed health education resources

products or the chlorine and fluoride content of drinking water.

Since health education often takes the form of a service (one of the forces affecting health--Level III of Figure 3), it is also important to set goals regarding health education services and/or to make sure that goals for health and medical care services incorporate strong educational components. These health education service goals may relate to the same characteristics DHEW has identified for all health services: i.e., availability, accessibility, continuity, acceptability, quality, and cost. In developing these health education services goals, consideration should be given to the priority gaps in meeting DHEW standards for health education practice presented on Page 41--or locally developed standards.

Health education is concerned, too, with individual, group, and community participation in health program development--as indicated in Item 4 of the definition of health education. This type of action (Level IV of Figure 3) does not fit DHEW's concept of a goal but it should definitely be included in health plans--probably among recommended actions. Likewise, the aspects of health education program development set forth in Levels V, VI, VIII, and IX of Figure 3 do not qualify as goals, but should appear in other parts of health education plans. A close relationship exists, though, between health education practices (Level VII) and the previously mentioned need to develop goals about health education services. This is the reason for the dotted line between these two boxes in Figure 3.

There are some differences of opinion about what the central thrust of health education should be. Some persons say it is optimum health (Level II). They see other levels as subgoals or intermediate goals. Advocates of this view believe health education is not successful unless it improves health.

Other persons argue that the real central and unique goal of health education is sound personal health-related practices and effective participation by individuals in community health program development (Levels III and IV). They concede such behavior change is important mainly because of its potential impact on health status, but they feel the health result is a function of physiological, epidemiological, medical, environmental, and other factors, not of the educational process. They believe health education should receive neither credit nor blame for health consequences of following recommended practices. For example, if education leads patients to take medicine as prescribed, they say the educational goal is achieved--even though health status may not improve (e.g., because a physician prescribed the wrong medicine). Or if educational experiences help a person decide to exercise appropriately and regularly, refrain from smoking, and eat wisely for many years, that educational effort is a success--even though the person educated dies of a heart attack at age 35. In this case, following the recommended actions increased the person's chances of averting illness and premature death (according to current knowledge), but it did not guarantee this physiological result. Conversely, someone who lives a full life for more than a hundred years while rejecting most recommended health practices is considered a health education failure by those who hold this view.

A third school of thought declares health education should focus on developing the ability of the general public to make informed decisions about personal and community health matters. Supporters of this philosophy point out that in a democratic society individuals have a right to follow or not follow practices as long as they do not infringe on the rights of others. Health education, this group says, should help people learn skills at identifying options available to them, and at selecting the route they wish to follow after considering anticipated health and other consequences of each alternative according to the best available knowledge. Attempts to motivate persons to change their practices through persuasion, peer pressure, behavior modification, or other means are considered manipulative, unethical, and/or invasions of privacy. Proponents of the informed decision-making approach expect a sizable proportion of persons skilled at decision-making will follow recommended practices and achieve better health. They feel, however, that health education should be directed at, and evaluated according to, development of these skills, not in terms of changes in health-related behavior or health status.

Some opponents of the latter stand indicate everyone has a responsibility to society (and, some say, to God) to take all reasonable steps to achieve and maintain health. This opinion is sometimes expressed in the following way: "If a heavy smoker gets lung cancer, why should tax money be used to pay for his medical care and for welfare costs required to take care of his family?"

It may be helpful to consider how these views about health education goals relate to a case history:

> *Harold Johnson, found by angiograms to have substantial blockage in three major branches of his coronary artery, is advised by his cardiologist, Dr. Roberts, and two consultants to have a triple bypass operation. The cardiologists tell him there is no evidence this operation will reduce his chances of having a heart attack or increase his life expectancy. But they say he would have an 85 percent chance of being able to function at a much higher level without angina. They add that a small percent of patients die during open-heart surgery.*

Mr. Johnson resists the proposed surgery mainly on the grounds that it deals only with the symptom, chest pain, and not the cause, atherosclerosis, and the causes of the atherosclerosis. Even if the surgery is successful, he says, his coronary arteries--including the bypasses--could clog more, or he could develop a stroke (since nothing would have been done to cut down on new deposits in the arteries). He has also read that heart surgery units are required to operate on a certain number of patients every year to meet American Heart Association standards--and he wonders if there is an unconscious incentive to "feed me to the monster" so it will survive.

He says he likes to maintain control of his own destiny and body, and dislikes becoming dependent on others or subject to their control. He also prefers to help his body cure itself through natural processes when possible rather than use radical artificial procedures. Furthermore, Mr. Johnson is concerned about how to pay for the very expensive operation since he has a son and daughter in college.

Mr. Johnson seeks additional opinions. Two physicians who work together tell him 95 percent of their patients who had been advised to have coronary bypasses have improved dramatically and not needed surgery--by following a diet-and-exercise regime. Mr. Johnson is impressed by their case histories, but he is concerned that this program has not been tested scientifically --e.g., through random assignment of patients to experimental and control groups. He learns, though, from his cardiologist, Dr. Roberts, that coronary bypasses haven't been tested this way either. Also, Dr. Roberts concedes the diet-exercise program is not likely to cause any harm. But he still recommends the surgery.

The diet-exercise program fits Mr. Johnson's desire to treat causes instead of symptoms, his preference for emphasis on natural processes and self-control, and his ability to pay. He decides his short-term goal will be to follow the diet-exercise program for several months to see what happens, then decide what to do next. His present thinking is that if the diet-exercise program does not improve his ability to function significantly, he may consider a combination of the coronary bypasses (to improve function) and the diet-exercise program (to reduce chances of future artery blockages).

What should have been the goal of a health education program related to Mr. Johnson? Prevent unnecessary disability and premature death? Carry out treatment prescribed by the three cardiologists, or treatment prescribed by the other two physicians? Develop Mr. Johnson's ability to evaluate alternative actions and their consequences and make informed decisions regarding selection and carrying out of needed treatment?

As the definition of health education presented earlier suggests, this publication favors emphasis on helping people develop their decision-making skills and use these skills in making choices--i.e., setting their own goals--regarding health-related behavior.

It is suggested, therefore, that goals concerning health education services include among indicators of quality performance a requirement for high priority on developing the decision-making skills of persons being served.

Goals concerning certain health-related behaviors, on the other hand, might be stated in terms of the estimated proportion of people being served who already want to achieve a behavior change (or who probably will want to after education about decision-making), and the proportion who would be successful in achieving it through an educational program. For example, it may be estimated that X percent of smokers would like to stop smoking, and X percent of this group (or of the total smoker group) will succeed in stopping after participation in an educational program.

In summary, health education goals fall in two general categories: health education services and personal health actions. Goals concerning health education services should relate to availability, accessibility, continuity, acceptability, quality, and cost--with emphasis on developing people's ability to make decisions and take actions. Goals concerning personal health actions should focus on helping people set and achieve their own goals about positive, preventive, and self-care behavior; use of services; and carrying out of treatment. Goals in both categories should cover all needs and opportunities given high priority in the problem-definition stage, identify people affected, relate to people's values and interests, and be achievable, quantifiable, measurable, and consistent with general health goals.

INVOLVEMENT

Health education goals should be of, by, and for the people being served--not the people providing services. The health planning agency's policies, therefore, should make certain that the public plays an initiating and creating role, not just a reacting role, in development of goal statements.

HPAs could also exert leadership in encouraging health practitioners to foster self-determination among their individual clients. If physicians and other providers of health and medical care services show interest in patients' and families' life goals, and facilitate their setting of health and behavioral goals that fit their general goals, it is possible there will be a considerable reduction in the one-third to one-half of patients who fail to carry out needed treatment.

EXAMPLES

The following statements in the left column illustrate weaknesses commonly found in health education goals. Those in the right column come closer to meeting the standards discussed above:

Weak	Stronger
1. Encourage smokers to stop smoking.	1. Enable 20 percent of interested cigarette smokers in this service area to stop smoking for at least one year.
2. Use all available media to educate the public about cervical cancer.	2. Increase from ___ to ___ the percent of women (between ages ___ and ___ from families with per capita annual income of less than $____) who get Pap smears every ______.
3. Make the public aware of the dangers of high blood pressure.	3. Increase from ___ to ___ the percent of persons with blood pressures higher than ___ systolic and/or ___ diastolic who visit a physician at least once every ______.
4. Urge hospitals to improve their patient education programs.	4. Increase from ___ to ___ the percent of hospitals with 150 or more beds in the area that conduct organized patient education programs scoring 90 percent or higher in relation to the criteria and evaluation schedule established by the health planning agency in the following document: "_______ ______________________________"

VI. DESIGNING PLANS

The National Health Planning and Resources Development Act requires each areawide health systems agency (HSA) to establish, annually review, and amend as necessary a health systems plan (HSP) and an annual implementation plan (AIP). Each statewide health coordinating council (SHCC) is required to prepare, review, and revise as necessary (but at least annually) a state health plan (SHP). The latter is to be made up of the areawide HSPs, modified as appropriate for coordination and for meeting statewide needs. The state plan is based on consideration of a preliminary plan prepared by the state health planning and development agency (SHPDA).[41]

The law and related guidelines call for the HSP, with a time horizon of five years, to include goals, long-range objectives, long-range recommended actions, and resource requirements. The AIP, which covers one year, is to include short-range objectives, short-range recommended actions, specific plans and projects, and resource requirements. The SHP consists of goals, objectives, recommended actions, and resource requirements. These prescribed contents are summarized below.[41,56,57]

Figure 4

CONTENTS OF HEALTH PLANS

Elements	HSP	AIP	SHP
Goals	Yes	No	Yes
Objectives	Long-Range	Short-Range	Yes
Recommended Actions	Long-Range	Short-Range	Yes
Specific Plans & Projects	No	Yes	No
Resource Requirements	Yes	Yes	Yes

Objectives

DHEW guidelines for areawide* plans state that:

> *Objectives express particular levels of expected achievements in health status or health systems by a specific year... They should be presented for those goals which have been identified as high priority. ... The accomplishment of objectives will lead to partial, or in certain instances the full attainment of goals.*[56]

The Committee on Evaluation and Standards of the American Public Health Association indicates an objective must specify:

> *What--the nature of the situation or condition to be attained;*
>
> *Extent--the quantity or amount of the situation or condition to be attained:*
>
> *Who--the particular group of people or portion of the environment in which attainment is desired;*
>
> *Where--the geographic area to be included in the program;*
>
> *When--the time at or by which the desired situation or condition is intended to exist.*[73]

Objectives are essentially the same as goals and should meet standards for goals. The major difference is that objectives should also include time targets.

Recommended Actions

According to DHEW, recommended actions are:

---

* Guidelines for state plans have similar statements about objectives.

> *...proposed changes in health and other community systems aimed at achievement of health status and health systems goals and objectives. ... The descriptions of such actions should include the alternative actions considered and the basis for the decisions made; the expected impact that selected actions will have in terms of improving health and the performance of health systems; the locus of responsibility for carrying out actions; and the types of services to be affected, the facility types involved, and the population groups or geographic areas affected.*[56]

Recommended actions should be definite, observable events. Each action should be necessary, and all of them taken together should be sufficient, to achieve relevant objectives. A time target should be specified for completing each recommended action.

Specific Plans and Projects

The specific plans and projects to be incorporated in the AIP should:

> *...include specific strategies for the development and implementation of programs. ... To the maximum extent practicable, the HSA should seek the sponsorship of other appropriate entities within the health service area for the implementation of such plans and projects.*[56]

Resource Requirements

Regarding resource requirements, DHEW says:

> *The estimates of required resources should identify the possible reallocation of existing resources as well as the development of new resources necessary to carry out the recommended actions.*[56]

STEPS

One system of designing plans for health education is described in nine steps under Item C on Page 25 of this guide. That system calls for selection of a general approach before setting objectives--since it is sometimes difficult to know how much can be accomplished without at least general consideration of an approach. As with problems and goals, though, there is really a need to look at both objectives and approaches simultaneously to some extent. To prevent confusion, the sequence and terms used here are consistent with those in the DHEW guidelines.

1. Set Objectives

Objectives specify the status of individual health behavior and of health education services desired during a particular time period. For the state health plan and the areawide health systems plan, the period covered is up to five years; the areawide annual implementation plan uses a one year horizon.

Each objective indicates how much of the relevant goal will be achieved by a particular time. If the goal is to have 100 percent of hospitals conduct organized patient education programs, for example, the five-year objective might be to reach 60 percent and the one-year objective 15 percent. Objectives may have to be revised after consideration of the realities involved in recommended actions and resources.

Many consumer and provider groups should be represented in shaping objectives. It may also be helpful to involve persons who will be responsible for evaluation--so objectives are stated in a way that will make evaluation feasible.

2. Choose Recommended Actions and Projects

Long-range recommended actions contribute toward achievement of long-range objectives. Short-range recommended actions contribute toward achievement of short-range objectives. Specific plans and projects may contribute toward achievement of short-range and/or long-range actions and objectives.

It may be helpful to decide on a general approach before trying to list specific recommended actions. Many different types of persons should be invited to brainstorm concerning various possible courses of action. This may be accomplished through forums in different communities, conferences conducted by committee and task force members with their respective constituents, conferences with staffs and board members of health and education agencies, and/or suggestions sent through the mail. Face-to-face discussion is the preferred method, but an opportunity for submitting written ideas may involve additional persons not able to attend meetings.

Participants should be thoroughly briefed on priority problems, priority goals, and tentative objectives. They may get additional leads by considering an analysis of what is known or needed in relation to Levels IV through IX of Figure 3. These levels pertain to individual, group, and community actions to deal with factors affecting health; positive and negative forces that impinge on these actions; present or potential supportive activities and health education practices; gaps in health education resources; and advocacy of health education by key persons. Data gathered during problem definition may trigger some ideas in these categories.

One subject that should be given special attention at this stage of program development is action to facilitate consumer participation in community efforts to develop environmental programs, socioeconomic measures, and health systems that facilitate health improvement. This important part of the definition of health education was excluded from consideration in goal setting because it doesn't fit DHEW's concept of a goal. Even though there is no goal specifically calling for consumer participation, it is important for all goals. Some recommended actions, therefore, should be devoted to making certain that:

* Consumers are broadly represented on governing bodies and committees of all health agencies, and are well prepared for this responsibility through orientation and training programs;

* Many other consumers are given opportunities to influence health policies and programs through a variety of mechanisms--such as hearings, forums, reviews of proposals, and surveys of opinions.

A key part of approaches to achieving behavioral and health education services objectives will be educational methods that fit the particular people, problems, goals, and objectives in each situation. Educational methods may be roughly divided into two categories: information-giving and problem-solving. Information-giving methods--with recipients being largely passive--include television, radio, newspapers, magazines, pamphlets, posters, exhibits, lectures, and dial-a-message services (among others). Problem-solving methods--which stress active involvement--include (among others) conferences between two individuals, group discussions, simulation exercises (e.g., games, role playing), and programed instruction (individuals using special texts, teaching machines, or computers to learn at their own pace). These two categories are not mutually exclusive. Informational media often provide opportunities for involvement (e.g., telephoned questions or comments to television or radio panelists, letters to the editor, questions to lecturers). And problem-solving methods almost always have an informational component.

A common deficiency in health education is an almost exclusive reliance on one-way preachy exhortations, regardless of the objective. Information is an essential part of the educational process--e.g., in developing awareness and interest. For the small percentage of persons who tend to be the first to try new ideas, or those on the verge of following a recommended health behavior, informational presentations may be enough to stimulate action. This is especially true if the action is a relatively simple one. But many of the behaviors required to improve health are inconvenient, costly, and repetitive, interfere with deepseated pleasurable habits, and sometimes seem only vaguely related to possible reduction in the risk of becoming disabled in the distant future. Many people are more likely to take actions of these types as a result of face-to-face discussions with persons they trust or through problem-solving procedures. Participation in problem-solving methods is especially appropriate if the central purpose of health education is seen as developing people's ability to evaluate on a continual basis the alternative possibilities in each new situation and their consequences, and make informed decisions for taking health-related actions.

Actually what is usually most productive is a combination of a variety of informational and problem-solving methods--designed to fit particular needs of particular groups at particular times with particular resources.

After alternative general approaches have been identified, each one may be written up, showing how it relates to objectives, goals, and population groups. Analyses about the potential effectiveness of each approach should be included when possible. This may feature findings of relevant educational or behavioral research if available. Otherwise, expert opinions may be useful.

Many different persons should have a chance to rank alternative approaches by applying such criteria as the following:

Extent to which--

...the public as well as personnel in health and other affected organizations will accept the approach;

...the approach will contribute significantly toward achievement of a priority health education objective;

...a large proportion of the population will benefit from the approach;

...the probable costs of the approach will be justified by the expected benefits;

...needed resources may be obtained;

...beneficial byproducts of the approach would outweigh harmful byproducts;

...the approach is consistent with relevant laws, regulations, and policies.

Each criterion may be weighted and each approach rated in the manner suggested on Page 46. It should be noted, however, that an approach might have to be eliminated rather than just downgraded in priority (e.g., if it would be illegal or have significantly harmful side effects). It is useful to keep a record of alternatives considered, and reasons for accepting or rejecting each one.

A series of recommended actions should be developed for the approach given highest priority--or the top two or three approaches. This should include a specific target date for beginning and completing each recommended action and each phase of specific projects. Opinions of a variety of persons--especially consumers, health education specialists, representatives of agencies involved in related programs, and sources of funding--may be obtained about each tentative approach and its recommended actions. This should include reactions to the general concept involved as well as suggestions for strengthening specific recommended actions. Some changes may also be needed to coordinate the proposed program with other existing or contemplated endeavors.

A revised statement of recommended actions may now be prepared. Persons or organizations responsible for carrying out each action and project should be determined. Expected impact on population groups, geographic areas, health, and health systems should be estimated.

3. Identify Resource Requirements

Resources needed to carry out recommended actions and specific projects should be determined. This includes financing, organizational mechanisms, personnel, facilities, equipment, supplies, technical assistance, and legislation.

DHEW's standards for health education resources, presented on Pages 43 to 45 of this guide, may be applied to the area served by the health planning agency to identify major gaps in resources.

It may be especially helpful to consider undertaking the following resource-development actions:

- Establish a health education center, council, or coalition to provide leadership in developing and coordinating health education resources;
- Explore with fiscal agents for governmental and private health insurance programs the possibility of reimbursing medical care agencies for patient education services:
- Provide continuing education opportunities to develop educational and human relations skills of health workers who come in contact with the public;
- Recruit volunteers with educational skills, and arrange with industry for loan of personnel who can help plan, operate, and evaluate health education programs;
- Establish policies for recruitment, preparation, distribution, utilization, supervision, and evaluation of health education specialists for functioning at various levels and in various types of programs.

Tentative commitments should be obtained for allocating resources to carry out recommended actions.

4. Develop Specific Evaluation Procedures

Plans for evaluation should be made now--before the program is implemented. Approaches are discussed in the chapter on evaluation.

5. Pretest Plans

At this stage it would be helpful to pretest all aspects of proposed plans. The draft to be tested should include tentative priorities on problems, goals, and objectives; recommended actions, specific plans and projects, and resource requirements; proposed evaluation procedures; responsibility for implementation; timetable; expected impact; and proposed linkages with related health and other plans. In areawide agencies, this pretesting may be done in one or two phases depending on whether the HSP and AIP are prepared at the same or different times.

Plans should be tried out in simulated situations when possible. Key phases could be implemented with typical individuals and groups to determine strong and weak points. Such trial runs can often produce more useful clues than asking for reactions, although the latter may also be worthwhile.

Pretesting can help eliminate undesirable components and introduce some features that appear promising. Conflicting points of view should be melded or otherwise resolved.

6. Obtain Approvals and Commitments

All appropriate organizations should be asked to endorse the health education plans. If they were involved in earlier stages of decision-making, this should present no problem.

Commitments should be obtained regarding needed resources and responsibility for carrying out recommended actions.

EXAMPLE

This is a hypothetical example of a process of designing plans related to the following goal (for an areawide health planning agency): Enable 20 percent of interested cigarette smokers in this health service area to stop smoking for at least one year.

Objectives

The health systems agency's Task Force on Personal Practices tentatively established the following objectives:

Long-Range: By 19-- (five years), 15 percent of persons in this health service area who want to stop smoking will have succeeded in doing this for at least one year.

Short-Range: By 19-- (one year), 1 percent of persons in this health service area who want to stop smoking will have succeeded in doing this for at least six months.

Recommended Actions

Discussions conducted in various communities and with staffs of health and education organizations by members of the Task Force, along with a staff review of the literature, yielded the following suggested alternative ways of achieving the objectives:

- *Saturation information program using television, radio, newspapers, posters, pamphlets, exhibits, etc. throughout the area;*
- *Taped messages that may be heard by telephoning a number that would be publicized;*
- *Lectures presented by physicians or nurses--including audiovisuals and question-answer sessions;*
- *Individual counseling service;*
- *Individual behavior modification by clinical psychologists, using various rewards and punishments as reinforcements;*
- *Series of group discussions led by professionals--including brief information-giving periods, but with main emphasis on discussion leading to decisions;*
- *Same as preceding, but led by volunteers who are given training in group leadership;*
- *Educate prospective parents about the importance of providing a warm, loving environment for their infants from the very beginning--so that as they grow up they will be less likely to use cigarettes, drugs, etc.*
- *Classes about smoking and other forms of substance abuse for fifth and sixth grade students--conducted by high school and college athletes;*
- *Discussions and problem-solving experiences in elementary and junior high schools about self-esteem, peer pressure, decision-making, and values clarification;*
- *Ask PTAs to urge parents to stop smoking because of their influence on their children's habits;*
- *Educate health workers about the importance of their serving as models of health behavior, especially in relation to smoking;*

Pass ordinances to ban smoking in such places as schools, hospitals, buses, auditoriums, athletic arenas, elevators, and restaurants;

Remove all cigarette vending machines from industries;

Allow cigarettes to be sold only at pharmacies by prescription;

Urge the state legislature to increase the tax on cigarettes (and use the income for health education).

Staff members of the health planning agency helped the Task Force prepare a statement of facts and expert opinions on the alternative approaches. Some of the information was extracted from the literature and from reports on the problem-definition stage of program development. Other facts and ideas came from the Lung Association, Cancer Society, Heart Association, and Medical Society; from a health education specialist at a County Health Department; and from a professor of social psychology at a local university. A ranking sheet was developed--including criteria on public acceptance, potential impact on smoking behavior, number of people that would benefit, costs, resources, and side effects. The ranking sheet was accompanied by analyses of related facts and opinions.

Task force members invited residents of various communities to participate in open meetings at which the alternative approaches were discussed and ranked. Persons in civic, social, and religious groups filled out the score sheets in connection with regular meetings of their organizations. Staff and board members of health and education organizations had similar opportunities. Rankers were asked to indicate whether they are smokers or nonsmokers; and if the former, whether or not they want to stop smoking.

These rating sessions resulted in the following sequence for the nine alternatives that received highest scores:

1. *Classes about smoking et al for fifth and sixth grade students;*
2. *Series of sessions in schools about self-esteem, peer pressure, decision-making, and values clarification;*
3. *Group discussion-decision--by volunteers;*
4. *Group discussion-decision--by professionals;*
5. *Educate prospective parents about providing loving environment for infants;*

6. *Saturation information program;*

7. *Ordinances to ban smoking in certain public places;*

8. *Educate health workers to serve as models of health behavior;*

9. *Tax on cigarettes;*

After discussing these rankings at length, developing a preliminary draft, and getting reactions, the Task Force decided:

* *The first two approaches are more concerned with "don't start smoking" than with "stop smoking" (although they also relate to the latter). A new goal should be developed for this important preventive area. These approaches will then be considered along other alternatives related to that goal.*

* *The top priority approach for dealing with the present goal will be group discussion-decision. During the first year the discussions should be conducted by professionals. After they gain experience, they will consider training volunteers to assume leadership.*

* *The voluntary health agencies have already conducted extensive media programs for several years. They have probably helped some of those on the verge of stopping to stop on their own. The mass media will be used now, therefore, to recruit smokers who want to participate in these groups as a means of trying to stop smoking. Also to publicize results when available. In subsequent years, an intensive coordinated media program will be directed at reinforcing and extending the group-discussion effort to reach many more persons.*

* *Education of prospective parents about providing a loving environment for their infants was considered too indirect for achieving the stop-smoking goal. It was thought to be probably one of the most promising long-range approaches, though, for affecting many different health behaviors. The Task Force will discuss setting a separate goal on this.*

* *Health agencies should be encouraged to educate their personnel to serve as models of health behavior. This, however, will not be included as part of the health planning agency's current plan. Health workers will be invited to refer clients who want to stop smoking to the proposed group discussions.*

- The health planning agency should explore further with State legislators the proposed increase in tax on cigarettes. This will be delayed until next year. At that time, the agency should ask health, education, and other organizations in the area to consider promoting such a tax. Other areawide health planning agencies as well as the state health planning and development agency should also be encouraged to consider whether or not such action is desirable.

- The Task Force will later determine if the present goal and the proposed new ones about smoking should be combined into one broader goal. In that event, some of the present alternatives might be incorporated in subsequent drafts as objectives or recommended actions.

The staff prepared a report summarizing the alternatives considered and the reasons for accepting or rejecting each one.

The Task Force then held a series of meetings to spell out recommended actions related to the proposed group discussion-decision program. Involved in these sessions were representatives of agencies already engaged in independent educational activities about smoking, largely through the mass media: Cancer Society, Lung Association, and Heart Association. Other participants represented health departments, school departments, industries, the Medical Society, and the public. A consultant in group work also joined the Task Force.

The consultant described several different possible ways of handling the groups. He strongly urged the Task Force, though, to adopt a particular one. This was an open-ended approach which would give participants a chance to analyze their own needs and interests (e.g., why each one smokes, methods of stopping they have tried); learn of research findings concerning alternative possibilities; set their own goals and objectives; select combinations of methods that fit their particular individual circumstances (e.g., reinforcements, counseling); decide about time, place, length, and frequency of meetings; and determine ways of obtaining needed resources.

This proposal took the Task Force by surprise. Some members protested vigorously, pointing to the difficulties such flexibility would pose for making specific plans, maintaining control, and predicting resource needs. After several hours of heated argument during two meetings, however, the consultant convinced group members that self-determination would have potential payoffs in creative ideas, learning, personal growth, motivation, and perhaps even resource development. At least they were willing to go along on a trial basis for a while.

Next the Task Force developed long-range and short-range recommended actions. The latter are as follows:

- By July 15, 19--, participating agencies will sign a written agreement covering roles, responsibilities, and relationships; number and size of groups; number of sessions agencies will finance; resource commitments; duration of test period; data collection and analysis; handling of news releases; and methods of modifying, terminating, or extending the agreement.

- By July 31, 19--, establish a project steering committee.

- By August 15, 19--, select a project director, group leaders, secretary, and group-work consultant.

- By September 30, 19--, complete a survey of smokers wanting to stop smoking--as a guide for program development and as a baseline for evaluating the project.

- By September 30, 19--, December 31, 19--, and March 31, 19--, recruit enough members to establish 20 groups (at 15 persons per group) for each of three rounds.

- By October 10, 19--, complete training of group leaders.

- By October 15, 19--, start conducting first-round group sessions; by January 15, 19--, start second-round sessions; and by April 15, 19--, start third-round sessions.

- By November 30, 19--, and February 28, 19--, complete reviews of progress to date (tentatively expecting to stop staffing each group after twelve weekly meetings).

- By June 30, 19--, complete evaluation of percent of participants in the first round of group meetings who stopped smoking for six months or for shorter periods--in relation to number of sessions attended. Obtain ideas for strengthening the program. Also determine the feasibility of using trained volunteers for future groups.

The staff produced the following chart to make it easy to visualize the timetable for action:

Actions	*J*	*A*	*S*	*O*	*N*	*D*	*J*	*F*	*M*	*A*	*M*	*J*
Sign agreement	—											
Establish committee	—											
Select director		—										
Conduct survey		—	—									
Recruit smokers		—	—			—		—	—			
Train leaders		—	—									
Conduct sessions				—	—	—	—	—	—	—	—	—
Review progress					—			—				
Evaluate results											—	—

The Task Force agreed that the project director should be allowed to develop the specific activities involved in each of the recommended actions. It was recognized that this could lead to modifications in the actions and/or timetable.

The process of specifying recommended actions and time targets led to the realization that there is time to complete six-month followups on only the first-round participants. The Task Force decided, therefore, to change the short-range objective to read as follows: By June 30, 19--, 20 percent or 60 of 300 smokers who try to stop smoking through participation in group discussion-decision sessions will have stopped smoking for six months.

Resource Requirements

The Task Force decided the following personnel would be needed on a half-time basis for the first year of the program: project director, 10 group leaders, and a secretary. Each group leader will handle two groups per round. A group-work consultant will be used to train the group leaders, observe opening sessions, and provide technical guidance. Ten meeting rooms will be needed twice a week for each of the 12-week rounds. Estimates were made of costs of travel, telephone, supplies, etc.

Evaluation Plan

Because of the lingering concerns of some Task Force members about leaving so many decisions up to participants, it was *agreed that half of the groups would use a more structured approach. Group participants will be assigned randomly to groups using the two different approaches and to groups that would be delayed (as controls). Each group leader will use the structured approach for half of his groups and the non-directive approach for the other half. The smoking practices of participants in the two types of groups and members of the control group will be compared. Students majoring in social psychology from a local university will document the process used at each session.*

Pretesting

Staff members of the health planning agency pretested the proposed program with 15 smokers who want to break their habit. Their responses seemed to confirm the assumption there would be many persons interested in joining the groups. Some suggestions were obtained for adjustments in the plans.

Approvals and Commitments

The HSA Board of Directors approved the program. Branches of the Cancer Society, Lung Association, and Heart Association, along with two health departments, two school systems, one university, and two industries will contribute the needed staff. Meeting rooms will be made available by participating organizations and two banks. Group participants will be asked to pay a fee that will cover other expenses.

VII. IMPLEMENTING PLANS

Health planning and resources development agencies do not operate programs, but they should develop plans in a way that fosters their implementation by others. Significant involvement of a wide variety of persons in every phase of program development is one of the best methods of assuring such commitment for follow-through.

STANDARDS

The federal health planning law and related guidelines state that HSAs should take the following steps to facilitate translation of plans into action:

- *Provide...technical assistance to individuals and public and private entities for the development of projects and programs which the agency determines are necessary to achieve the health systems described in the HSP;*[41]
- *Make grants to public and nonprofit private entities and enter into contracts with individuals and public and nonprofit private entities to assist them in planning and development projects and programs which the agency determines are necessary for the achievement of the health systems described in the HSP;*[41]
- *Take positions on issues of local, state, or national concern affecting the health status of area residents or health systems within the health service area in order to focus public attention upon, and to seek support for the implementation of agency plans;*[51]
- *Review and approve or disapprove each proposed use within its health service area of federal funds;*[41]
- *Review and make recommendations to the appropriate state health planning and development agency respecting the need for new institutional health services proposed to be offered or developed in the health service area;*[41]
- *Review on a periodic basis...all institutional health services offered in the health service area...and make recommendations to the state health planning and development agency...respecting the appropriateness in the area of such services;*[41]

- *Annually recommend to the state health planning and development agency...projects for the modernization, construction, and conversion of medical facilities in the agency's health service area which projects will achieve the HSP and AIP of the health systems agency, and priority among such projects;*[41]

- *Coordinate its activities with...any other appropriate entity;*[41]

- *Develop and adopt procedures for providing residents and various special interest groups within the health service area, and other interested or affected groups or individuals, information on the purposes and provisions of Public Law 93-641 and the organization and operation of the HSA;*[51]

- *Adopt a policy for making its records and data available to the public for inspection and copying. The policy should include the procedures for ensuring that agency plans, review procedures and criteria, reports, records, and data...are made readily available to the residents of the health service area and to the various communications media serving the area.*[51]

- *Develop and adopt procedures for ensuring that the residents and various special interest groups within the health service area, as well as other interested or affected groups or individuals, have an opportunity to express their views on the organization and operation of the HSA and its planning and implementation activities;*[51]

- *Be involved in assuring that the consumer community is educated in the use and the functioning of the health system. Educational programs designed to influence consumers to exercise their responsibility for their own health should be strongly supported by the HSA, although not directly provided.*[74]

Federal guidelines indicate state health planning and development agencies have the following responsibilities for facilitating implementation of their plans:

> *Because of the critical involvement of the state in resources allocation and development, the SHPDA will be a vital force in implementing the recommendations of the HSAs' and the SHPDA's own resource requirements through suggesting legislation, regulations, guidelines and policies, and through its own regulatory activities. ...*
>
> *The principal focus within the SHP on implementation strategies should be one of implementing those parts of the SHP and the plans of HSAs within the state which relate to the government of the state and which are specified responsibilities of the state. This may involve the enactment of state legislation, the implementation of state health policy, and the use, availability and provision of state government resources to accomplish priority activities. The*

> *state should give special attention to the coordination with health manpower planning and activities to ensure an integration of effort throughout the state.*[57]

METHODS

Technical Assistance

Health planning agencies can be especially helpful to the many organizations that operate health education programs and services by providing advice, training, and materials about the planning process as it relates to their programs.

HPAs also have much expertise to offer other organizations concerning effective involvement of a broad range of consumers and health personnel in decision-making, and preparing them for such responsibilities.

Grants and Contracts

Among the many possible health education projects health planning agencies could help finance, the following should be especially useful in advancing the state of the art in their area: initiating an organizational mechanism (such as a health education center, council, or coalition) to serve as a focal point for health education resource development; establishing a practical, effective system for problem definition in health education; and field-testing simple systems for evaluating health education processes and products.

Issues

Health planning agencies can help focus public attention on health education by taking strong public positions on such important issues as: fluoridation referenda; patients' rights to be informed, make their own decisions, and be treated with dignity; need for comprehensive health education curricula in schools; rights of nonsmokers to breathe clean air in public places; and importance of including consumer majorities on governing bodies of health organizations.

Reviews

In reviewing proposed uses of federal funds, changes in institutional health services, and facilities development, health planning agencies should (1) make sure all proposals that involve public action include appropriate provisions for public education; and (2) require that all proposed health education programs or services meet high standards.

Review of health education proposals and educational components of other health proposals should consider at least the criteria set forth in the federal health planning law for reviewing proposals:

- *The relationship of the health services being reviewed to the applicable HSP and AIP;*
- *The relationship of services reviewed to the long-range development plans (if any) of the person providing or proposing such services;*
- *The need that the population served or to be served by such services has for such services;*
- *The availability of alternatives, less costly, or more effective methods of providing such services;*
- *The relationship of services reviewed to the existing health care system of the area in which such services are provided or proposed to be provided;*
- *The availability of resources (including health manpower, management personnel, and funds for capital and operating needs) for the provision of such services and the availability of alternative uses of such resources for the provision of other health services;*
- *The special needs and circumstances of those entities which provide a substantial portion of their services or resources, or both, to individuals not residing in the health service areas in which the entities are located or in adjacent health service areas;*
- *The special needs and circumstances of health maintenance organizations.*[41]

Other ideas for criteria to use in reviewing health education proposals may be obtained from the DHEW standards for health education practice and resources presented on Pages 40-1 and 44-6 of this report and from the Health Education Program Development Scorecard presented on Pages 94-104.

Coordination

Since fragmentation of effort is one of the main deficiencies of health education in most places, health planning agencies can make a great contribution to the field by facilitating coordination. Bringing representatives of many organizations together to plan jointly for health education is obviously a major activity of this type. Encouraging collaboration in operating programs is also important. Examples are sharing resources, preventing unnecessary duplication, promoting continuity of services, and establishing central sources where people may obtain information about health and health services. Some areas have found that health education centers, councils, or coalitions may serve as effective means of coordinating activities of many agencies.

Direct Education

Health planning agencies have a responsibility to educate the public about the health planning law and about their own organization. This includes making records and data readily available. HPAs also encourage broad public participation in influencing decisions, and educate board and committee members for effective involvement. By performing these responsibilities well, health planning agencies can help demonstrate sound health education approaches.

Facilitating Action

Perhaps the most important contribution of health planning agencies to health education program development is their leadership in mobilizing health education resources to develop and implement comprehensive health education plans. In an area having many health education resources, an HPA may serve primarily as convener and coordinator. Where resources are scarce, on the other hand, a health planning agency may play more aggressive initiating, advocating, and stimulating roles. Either approach to facilitating implementation will be easier to accomplish if (1) all key interests have been effectively involved in program development and (2) if plans are thoroughly developed.

VIII. EVALUATING PROGRAMS

To what extent do programs achieve intended (or other) objectives, carry out recommended actions, and use resources as planned? Should programs continue? If so, what revisions, if any, should be made?

Many persons say it is difficult or impossible to evaluate health education. They point to the complexities of human behavior and what they see as a scarcity of effective, practical ways to measure it. They mention the problems involved in determining cause-effect relationships because of the multiple factors at work. They cite the many years it sometimes takes for people to change certain types of behavior or for the health effects of some practices to become apparent.

If a good job is done, though, in defining problems, setting goals, designing plans, and documenting implementation efforts and results, some useful evaluation of health education is feasible.

STANDARDS

The federal health planning law indicates that DHEW will review in detail at least every three years the structure, operation, and performance of the functions of each health systems agency and state health planning and development agency. These evaluations will determine:

- *The adequacy of health plans in meeting the needs of the residents...;*

- *If the structure, operation, and performance of the functions of the agency meet the requirements of the law;*

- *The extent to which the agency's governing body represents the residents and has performed in a manner consistent with requirements of the law;*

- *The professional credentials and competence of the staff of the agency;*

- *The appropriateness of the data assembled...and the quality of the analyses of such data;*

> - *The extent to which technical and financial assistance from the agency have been utilized in an effective manner to achieve the goals and objectives of the health plans;*
>
> - *The extent to which it may be demonstrated that (a) the health of the residents...has been improved; (b) the accessibility, acceptability, continuity, and quality of health care has been improved; and (c) increases in costs of the provision of health care have been restrained.*[41]

To be logical and complete and to be consistent with DHEW guidelines, the last of these items should be amended to include: ... (d) the physical environment has been improved; (e) socioeconomic conditions affecting health have been improved; and (f) personal health-related behavior has been improved.

Performance standards guidelines issued by DHEW state:

> *The HSA shall develop, and shall maintain and utilize on an ongoing basis thereafter, an internal management reporting system which will permit regular monitoring of the agency's progress in accomplishing its annual work program, and provide on a timely basis relevant information for effectively and efficiently managing agency resources.*
>
> *The management reporting system shall provide, at least quarterly, relevant information and data pertaining to progress in accomplishing the objectives and completing the major tasks specified in the agency's work program and permit identification of any variance between the planned activities and utilization of resources...and the actual accomplishments and expenditures.*[51]

These standards pertain to performance of health planning agencies, but the performance of many other organizations and individuals is also relevant. This applies not only to their involvement on the health planning agencies' governing bodies and committees, but also to their responsibilities for carrying out plans given priority by the health planning agencies.

STEPS

Representatives of all affected organizations and populations should participate in deciding why, what, how, when, where, and by whom health education programs should be evaluated. Appropriate involvement is especially important for this stage of program development, because a lot is at stake. An operating organization's credibility and its staff members' jobs could be lost. The rights of consumers to effective service delivered in a respectful manner must be protected. Accountability for expenditure of funds, whether public or private, is essential. Performance that meets high standards is of interest to professional groups. Achievement of objectives through implementation of recommended actions using planned resources is of concern to health planning agencies. An evaluation task force, therefore, might include representatives of consumers, operating agencies, funding agencies, professional peers, and health planning agencies. If an outside consultant is used, he or she should be guided by such a group.

Plans for evaluation should be developed before the program is carried out. The plan should specify what information will be collected, how and when it will be obtained, how it will be analyzed, and who will be responsible for each of these activities. Sometimes baseline data are collected before the program begins. Data on process and results are gathered and may be analyzed while the program is in operation (for possible adjustments) as well as at the end and later--for determination of immediate and continued impact. In some situations, persons being served by a health education program can collect and analyze their own data--for both evaluative and educational reasons.

Each of the evaluation steps proposed earlier in this document, with a few minor changes to make language consistent with that in DHEW guidelines, is discussed briefly here.

1. Determine extent to which objectives have been achieved

If objectives are set in clear, measurable terms during the planning phase (and/or criteria for success are specified), and if relevant data are collected before, during, and after the implementation phase, this key aspect of evaluation should be attainable. Data may be gathered through questionnaires, interviews, diaries, health records, or other methods. The increasingly popular problem-oriented medical record lends itself to relatively simple storage and retrieval of some relevant data in medical care settings. Various techniques may be needed because of the wide differences in types of behavior that could be evaluated. Some personal behaviors, for example, should occur daily (nutritious meals), some several times a week (vigorous exercise), some once a year (detection tests), some only in connection with certain activities (use of safety belts), some once in a lifetime (certain immunizations), and some never (smoking). Delivery and use of health education services present additional types of behavior that need to be documented.

Changes in the promptness and appropriateness of use of services are probably easier to determine accurately than changes in personal habits (e.g., smoking) or in carrying out needed treatment (e.g., taking medication). Researchers have found substantial errors in self-reporting of personal health-related behavior. This has led to occasional use of blood, urine, or other tests to gather objective data on such behavior (e.g., the following of low-sodium diets). Some persons, though, object to this kind of data collection.

Changes in availability, continuity, acceptability, accessibility, quality, and cost of health education services could be brought to light through record-keeping, surveys of clients, observation, analyses, self-assessment, or peer reviews.

2. Determine extent to which recommended actions and activities were carried out and resources used as planned

This calls for keeping records of actions and when they are carried out (in relation to target dates), the numbers of different types of paid and volunteer personnel used, the amount of time they work on various parts of the program, and dollars spent--e.g., for staff, consultants, services, equipment, and supplies. Reasons for changes in actions and resources should also be recorded and analyzed.

Some simple documentation techniques may be helpful. For example, a deadline chart may be set up in an 8½" x 11" looseleaf notebook:

> *In the first column list each proposed step or event. In the second column show the planned date of completing each step, and leave the third column blank to enter the actual date of completion. The fourth and fifth columns may be devoted to the number of working days planned and actually spent for each step. A sixth column, either on the same or the facing page, may be used for very brief comments (using just key words and phrases) about why a deadline was not reached, weaknesses with a given step or sequence, etc. Photocopies of the chart may be used as progress reports to co-workers, administrators, and committees. These reports, along with analyses of time spent on each activity by various persons, and analyses of other issues, could lead to mid-course corrections in plans.*[55]

A large program management board may serve as a supplement to or substitute for the notebook chart:

> *Using a peg board..., two horizontal rows of holes may be allocated to each project, the first row for planned dates*

> *of completing steps, the second for actual dates. Each vertical row represents a given work day. Golf tees may be used to indicate dates, using a different color for each step (but the same color for the planned and actual dates of a given step). Elasticized string may be stretched from the top to the bottom of the board to indicate the current day. This type of board gives staff, committee members, and others a quick picture of the history, current status, and upcoming deadlines of a program--or of many concurrent programs.*[55]

Health education staff members of the Orange County Health Department in California keep daily logs of activities, using a system of codes. Through keypunching and computer processing, eight reports are generated on a regular basis (e.g., number of hours by type of activity by district, number of various types of products developed for each program by each staff member).[75]

Records of committee meetings should show participants, issues discussed, alternatives considered, decisions reached (with reasons), and responsibilities assigned.

3. Determine relationships between achievement of objectives, carrying out of recommended actions and activities, and use of resources

This is one of the most important, but most difficult, parts of program evaluation. Determining whether successes or failures in achieving objectives are caused by program actions and resources or by other factors may require carefully controlled experiments.

A staff member of DHEW says:

> *...studies of outcome or effectiveness (end results) are generally too complex and beyond the capabilities and interest of most persons directing the usual health and medical care programs. Furthermore, most funding agencies, be they private or governmental, would be unwilling to commit the resources necessary to do the job in every service project, assuming the necessary personnel could be found.*
>
> *Assessment of end results or effectiveness should be done in selected situations by persons highly sophisticated in this type of research. ...*
>
> *...evaluation in the usual service program or project should be confined to a quality control type of evaluation based on process or intermediate goals. ...*[76]

Dr. Lawrence W. Green and Dr. Irene Figa-Talamanca, of Johns Hopkins University School of Hygiene and Public Health, however, believe relatively simple and economical designs may be used for valid determination of the effects of health education, especially education of patients. They describe six evaluative designs, two of which are true experimental designs calling for random assignment of patients to experimental and control groups. To keep from depriving members of the control group of participation in the educational program, they may receive the educational experience after completion of the experimental group's education and testing.[77]

Efficiency of health education programs may be evaluated by identifying and analyzing costs of attaining each objective. Facts recorded during the program, along with opinions of participants and observers, may suggest ways of reaching the same ends with fewer resources or making the same level of resources more productive. Or it may be found that not enough resources were used to achieve the program's objectives.

Assistance in designing and carrying out studies of program effectiveness and/or efficiency may be obtained from faculty or students in departments of sociology, psychology, anthropology, education, or health education at universities; or from systems analysts, operations researchers, statisticians, or other specialists in industry or government.

4. Determine strengths and weaknesses of program development processes

Decisions and predictions made and processes used at all stages of program development should be reviewed. This includes involvement, problem definition, goal setting, plan design, plan implementation, and program evaluation. Effectiveness, efficiency, and appropriateness of each procedure should be analyzed in light of the operational experience. This step is greatly facilitated if all procedures followed and all decisions made and their reasons are well recorded when they occur.

A Health Education Program Development Scorecard is presented on Page 94. This may be used as a guide during the time a program is being developed and/or as a tool for evaluating the process after a plan or program has been completed.

5. Determine favorable and unfavorable byproducts

"The operation was a success but the patient died" is the punch line for many jokes and cartoons. It could be the sad-but-true evaluation of a health education effort. A health educator's satisfaction at helping a man stop smoking is bound to be somewhat diminished, for example, if the man becomes grossly overweight and so irritable that his wife divorces him. Another person who stops smoking as a result of the same program, though, might feel better than he has felt for years and his wife might become a happier and more loving person now that she doesn't have to put up with foul air and ashes.

It is obviously desirable to look for side effects--both positive and negative--as well as achievement of intended objectives.

6. Review importance of this program compared with others

After going through Steps 1-5 in evaluating a given program, it is desirable to compare its appropriateness and value with those of other current and potential programs. This review should take into account any significant new developments (e.g., shifts in public values or interests, additional data on needs, or changes in availability of resources) that may call for a different program--or an expansion of the present program.

Many bureaucracies develop their own mechanisms for self-preservation. It is only in the past few years that some governmental agencies have started establishing "sunset" policies that require programs to terminate within a certain time period unless they can prove their worth.

Unfortunately, for health education programs the sun too often sets very soon after it rises. Arthur D. Little, Inc. found in a survey of health education programs that:

> *The large majority of programs seem to be short-term programs which operate at most over a period of 3-4 months, and more usually over an even shorter period.*[24]

A committee representing the Society for Public Health Education and American Public Health Association, which in another survey identified a similar shortness of life expectancy, concluded that one key reason is the difficulty of interpreting the value of health education. One participant in a workshop conducted by the committee put it this way:

> *The funding of health education programs is closely tied to the concept of prevention and, like prevention, is least dramatic when it is most effective. When a problem is avoided, no crisis occurs, hence no "miracle" is performed and the results of the effort lose visibility.*[38]

Health education programs--along with all others--should undergo repeated assessment in relation to other alternatives. But the comparisons should be fair--with consideration of the real (even if invisible) effectiveness and benefits in relation to costs.

7. Decide whether or not to continue; if so, recommend ways to improve program

Programs selected for continuation should be upgraded by making revisions suggested in evaluation findings. This could affect any part of a program--e.g., population group reached, involvement in decision-making, problems, goals, objectives, actions, or resources.

EXAMPLE

Following is a summary of an evaluation conducted by Thomas S. Inui, M.D., as his masters thesis at Johns Hopkins University School of Hygiene and Public Health:

> *Patients with hypertension at a Baltimore clinic followed medical advice better and had better health status as a result of counseling by physicians who had been tutored about patient education. ...*
>
> *The project was carried out at the General Medical Clinic of Johns Hopkins Hospital, which serves primarily a low-income black population. Hypertension is the most common principal diagnosis at this clinic (34% of one month's visits).*
>
> *Physicians (62) and patients (119) were assigned to experimental and control groups according to the clinic sessions they attended. Physicians were medical interns, assistant residents, fellows and senior physicians. Patients were those who had essential hypertension as their only active diagnosis and who were on anti-hypertensive drugs.*

Each physician in the experimental group took part in a single, 60 to 90 minute tutorial conference conducted by the investigator during December, 1972. This conference covered hypertension and its treatment, compliance by patients, and the importance of patients' perceptions about seriousness of the disease, their susceptibility even when without symptoms, and the efficacy of available therapy. Physicians in the control group received "placebo" information about a research project involving some of their patients.

Before-after tests were administered to physicians and patients in August, 1972 and January, 1973 to determine changes in knowledge and practice and to monitor patients' health status. Only 20% of the August patient group was also in the January group, but the other patients were closely matched. Before and after physician groups were the same.

In Round 1 (the before test), control and experimental physicians and their patient groups had similar scores on all study items.

In Round 2, physicians in the experimental group showed better scores than those in the control group on awareness of noncompliance; time spent on patient education; and recording information about compliance, knowledge, and teaching.

Patients in the experimental group showed better Round 2 scores than those in the control group on knowledge of: drug treatment; diet; potential for heart damage, function loss, and death; problems if drugs were stopped; and drug efficacy. Study patients did a better job of taking prescribed drugs (61% vs 32%), and showed better blood pressure control (69% vs 36%).[78]

IX. HEALTH EDUCATION PROGRAM DEVELOPMENT SCORECARD

The following instrument may be used either as a checklist during program development or as a self-evaluation schedule after a health education plan or program has been completed. The scorecard relates to the process of health education program development, not the results of health education programs. There are sections on involvement, defining problems, setting goals and objectives, recommending actions, obtaining resources, planning for implementation, and planning for evaluation.

To arrive at a score for each section, add ratings for the subsections and multiply by the indicated weighting figure. Add all section scores to determine the overall gross score. This may be divided by 2 to yield a score that relates to a scale of 100. Section and overall scores of all raters may be averaged, then used as a basis for discussion of strengths and weaknesses in health education program development.

The scorecard may be revised, of course, to make it fit ideas and opinions of persons involved in a particular agency's health education planning activities.

INVOLVEMENT

Breadth

	(Circle one)
Representatives of all key interests are involved in health education program development (including all parts of the population--especially those directly affected; health and education specialists, administrators, and others--especially from organizations likely to have responsibility for financing and/or implementing plans).	5
Most significant groups are involved	3
Only a few significant groups are involved	1
No significant groups are involved	0

Scope

	(Circle one)
Consumer and provider decision-making relates to all phases of health education program development: defining problems, setting goals, designing plans, implementing plans, and evaluating programs.	5
Consumer and provider decision-making relates to most phases of health education program development.	3
Consumer and provider decision-making relates to only a few phases of program development.	1
Consumer and provider decision-making relates to no phases of program development	0

Depth

	(Circle one)
Consumers and providers play a significant role in shaping health education decisions (Opinions, ideas, and desires are obtained from a wide variety of consumers and providers not on committees--through forums, surveys, hearings, draft reviews, etc. Consumer and provider committee members build on these alternative ideas, consider pros and cons, and make decisions).	5
Consumer and provider committee members initiate alternative ideas and make decisions, but with limited consideration of ideas, opinions, and desires of non-committee members.	3
Consumer and provider committee members initiate ideas and make decisions, but with no consideration of ideas, opinions, and desires of non-committee members.	1
Committee members approve or disapprove ideas and decisions proposed mainly by staff.	0

Involvement rating (add three circled numbers) ___

Involvement score (rating X weighting of 4) ___

DEFINING PROBLEMS

Breadth

	(Circle one)
All parts of the population are considered in defining health education problems	5
Most populations groups are considered	3
Only a few population groups are considered	1
No population groups are considered	0

Scope

	(Circle one)
Health education problem definition includes analysis of current and projected gaps in (a) all of the following aspects of individual health-related behavior: promotion of vigorous well-being, prevention of disability and premature death, self-care of minor illnesses, appropriate use of services, carrying out of needed diagnostic and treatment procedures, and participation in community health program development; (b) health education practices and services; (c) health education resources; and (d) positive and negative forces affecting behavior, services, and resources.	5
Most of these areas are covered.	3
Only a few of these areas are covered.	1
None of these areas is covered.	0

Depth

	(Circle one)
Health education problems are thoroughly analyzed, using data and criteria that provide a valid, reliable, and appropriate basis for program decisions.	5
Problem definition is based mainly on opinions of key consumers and providers about obvious needs and opportunities, but with steps taken toward obtaining and thoroughly analyzing valid, reliable, and appropriate data within the next few years.	3
Problem definition is based on opinions, with no steps taken toward obtaining and analyzing valid, reliable, and appropriate data.	1
Health education problems are defined poorly or not at all.	0

Problem Definition rating (add three circled numbers) ___

Problem Definition score (rating X weighting of 2) ___

SETTING GOALS AND OBJECTIVES

Scope

	(Circle one)
Decisions about priority health education goals and objectives are based on consideration of (a) gaps in all the following types of health-related behavior: promotion of vigorous well-being, prevention of disability and premature death, self-care of minor illnesses, appropriate use of services, and carrying out of needed diagnostic and treatment procedures, and (b) weaknesses in the following characteristics of health education services: availability, accessibility, continuity, acceptability, quality, and cost (with special consideration, under quality, for development of people's decision-making abilities). All health education goals and objectives relate to one or more of these categories of behavior or services.	5

Most goals and objectives relate to these categories.	3
Only a few goals and objectives relate to these categories.	1
None of the goals and objectives relates to these categories.	0

Appropriateness

	(Circle one)
Selection of health education goals and objectives is based on relevance to people's values and desires, number of persons likely to benefit, amount of expected benefit per person in relation to cost, and byproducts that are expected to be more favorable than unfavorable.	5
These criteria have moderate impact on selection of health education goals and objectives.	3
These criteria have little impact.	1
These criteria have no impact.	0

Achievability

	(Circle one)
Goals and objectives are stated in terms of intended outcomes (not activities or processes). Desired changes are specific, and allow quantitative measurement. Needed knowledge and resources are available. Affected population groups are indicated. Objectives include time targets.	5
Health education goals and objectives meet these requirements fairly well.	3
Health education goals and objectives meet these requirements only to a limited extent.	1
Health education goals and objectives do not meet these requirements at all.	0

Goals and Objectives rating (add three circled numbers) ___

Goals and Objectives score (rating X weighting of 2) ___

RECOMMENDING ACTIONS

Scope

	(Circle one)
Recommended actions are based on consideration of positive and negative forces affecting health-related behavior and health education services, alternative educational methods, possible supportive activities, gaps in resources, and needed advocacy.	5
Most of these factors are considered	3
Few of these factors are considered	1
None of these factors is considered	0

Appropriateness

	(Circle one)
Selection of recommended actions is based on: relevance to people's desires, what is necessary and sufficient to achieve priority goals and objectives, the need to improve consumer participation in community health program development, consistency with knowledge about how people learn, byproducts that are expected to be more favorable than unfavorable, and results of pretesting.	5
These criteria have some impact on selection of recommended actions	3

	(Circle one)
These criteria have little impact on selection of recommended actions.	1
These criteria have no impact on selection of recommended actions.	0

Achievability

	(Circle one)
Selection of recommended actions is based on availability of knowledge and resources that show potential for their achievement. Progress is measurable. Affected population groups and expected impact are indicated. Time targets are included.	5
Most of these aspects are considered.	3
Only a few of these aspects are considered.	1
None of these aspects is considered.	0

Recommended Action rating (add three circled numbers) ___

Recommended Action score (rating X weighting of 2) ___

OBTAINING RESOURCES

Scope

	(Circle one)
Plans for resources are based on consideration of needs for money, personnel, organizational mechanisms, facilities, equipment, supplies, technical assistance, and legislation.	5
Most of these aspects are considered	3
Only a few of these aspects are considered	1
None of these aspects is considered	0

Appropriateness

	(Circle one)
Selection of resources is based on relevance to people's desires, what is necessary and sufficient to carry out recommended actions, consideration of alternative types of resources, and consistency with knowledge about effective and efficient resource use.	5
Most of these aspects are considered	3
Only a few of these aspects are considered	1
None of these aspects is considered	0

Resources rating (add two circled numbers) ___

Resources score (rating X weighting of 2) ___

PLANNING FOR IMPLEMENTATION

Facilitation

	(Circle one)
The health planning agency facilitates implementation of health education plans through technical assistance, grants and contracts, taking public stands on relevant issues, requiring inclusion of high-quality health education components in proposals for use of federal funds and for new institutional services, helping coordinate health education activities, and advocating allocation of needed health education resources by administrators, legislators, and others.	5
The HPA engages in most of these activities.	3
The HPA engages in only a few of these activities.	1
The HPA engages in none of these activities.	0

Commitment

	(Circle one)
Appropriate operating agencies make definite commitments for allocation of needed resources to implement the health education plans.	5
Most of the needed resources are committed.	3
Only a few of the needed resources are committed.	1
None of the needed resources is committed.	0

Implementation rating (add two circled numbers) ___

Implementation score (rating X weighting of 1) ___

PLANNING FOR EVALUATION

Scope

	(Circle one)
Plans for evaluation of health education programs call for assessing: (a) achievement of objectives; (b) completion of actions and use of resources as planned; (c) relationships between achievement of objectives, carrying out of actions, and use of resources; (d) strengths and weaknesses of program development processes; (e) favorable and unfavorable byproducts, and (f) importance of this program compared with others.	5
Evaluation plans include most of these components.	3
Evaluation plans include only a few of these components.	1
Evaluation plans include none of these components.	0

Appropriateness

	(Circle one)
Plans for evaluation of health education programs are relevant to the desires of people being served, program funders, and program operators; insure valid, reliable findings; are expected to be worth the cost; and plans for evaluation are completed before the program is implemented.	5
Evaluation plans meet most of these requirements.	3
Evaluation plans meet only a few of these requirements.	1
Evaluation plans meet none of these requirements.	0

Evaluation rating (add two circled numbers) ___

Evaluation score (rating X weighting of 2) ___

GROSS HEALTH EDUCATION PROGRAM DEVELOPMENT SCORE ___
(add scores for all sections)

FINAL HEALTH EDUCATION PROGRAM DEVELOPMENT SCORE ___
(divide gross HEPD score by 2 to put final HEPD score on scale of 0 to 100)

X. SOURCES OF ASSISTANCE

Health planning agencies seeking help for health education program development may want to consider the following sources: their own staff, local and state organizations, regional resources, and national agencies.

HEALTH PLANNING AGENCY STAFF

Because of the importance, pervasiveness, and complexity of health education program development, each health planning agency should consider including on its staff at least one full-time health education specialist (preferably with master's level preparation). This person or these persons could be assigned the agency's responsibilities to (1) inform the public about the health planning law and the agency's activities, (2) encourage broad participation in health plan decision-making, (3) orient members of boards and committees, and (4) provide services to committees and task forces charged with planning, implementing, and evaluating health education programs. A health planning agency may also want to consider employing one or more health education specialists to assume responsibility for professional education components of health planning.

Specialists in health education usually have preparation in various health subjects, behavioral sciences, educational principles and methods, group work, community organization, communications media, program planning and implementation, administration, and evaluation.

Graduate programs in community health education accredited by the American Public Health Association are listed on Page 391 of the April, 1977 issue of the American Journal of Public Health. Also listed are accredited schools of public health, most of which prepare health education specialists.

LOCAL AND STATE

As indicated in the Chapter III section on involvement, and throughout this guide, many different types of persons can provide useful assistance in developing health education programs. A key contact person for identifying health education resources in most states and cities is the director of health education at state or local health departments or voluntary health agencies. For health education resources related to schools, the director of or consultant in health education at state or local departments of education can be helpful.

REGIONAL

The ten centers for health planning established through the national health planning law to provide technical assistance requested by health planning agencies, and to develop health planning approaches, may be able to help with health education program development.

The ten regional offices of the U.S. Department of Health, Education, and Welfare have consultants of many types on their staffs. Some have health education specialists.

Addresses and telephone numbers of the centers for health planning and the DHEW regional offices should be available at state health planning agencies or state health departments.

NATIONAL

The U.S. Department of Health, Education, and Welfare and other federal agencies have extensive technical assistance resources relevant to health education scattered among their many national offices. The key contact points for assistance regarding health education in relation to health planning are the following:

Bureau of Health Planning
& Resources Development
HRA-PHS-DHEW
Center Building, Room 5-22
3700 East-West Highway
Hyattsville, MD 20782
Telephone: (301) 436-6733

Bureau of Health Education
CDC-PHS-DHEW
1600 Clifton Road, NE
Atlanta, GA 30333
Telephone: (404) 633-3311

The major non-governmental national organization concerned with providing technical assistance regarding health education program development is the National Center for Health Education. Besides giving information about its own resources, the Center can help identify the many other private organizations that provide technical assistance regarding health education.

National Center for Health Education
Suite 2564
44 Montgomery Street
San Francisco, CA 94104
Telephone: (415) 981-5160

Several national professional associations have special interests in quality preparation and practice in health education. They could provide names of members living in particular states or cities. Some have chapters in certain locations. The headquarters offices of these associations are as follows:

American Alliance for Health, Physical
Education, and Recreation
Association for the Advancement of
Health Education
1201 16th Street, NW
Washington, DC 20036
Telephone: (202) 833-5535

American College Health Association
Health Education Section
2807 Central Street
Evanston, IL 60201
Telephone: (312) 491-9775

American Public Health Association
Public Health Education Section
1015 Eighteenth Street, NW
Washington, DC 20036
Telephone: (202) 467-5000

American Public Health Association
School Health Section
1015 Eighteenth Street, NW
Washington, DC 20036
Telephone: (202) 467-5000

American School Health Association
National Office Building
Kent, OH 44240
Telephone: (216) 678-1601

Society for Public Health Education
693 Sutter Street
San Francisco, CA 94102
Telephone: (415) 673-7266

REFERENCES

1. Henrik L. Blum and Associates, *Notes on Comprehensive Planning for Health*. San Francisco: American Public Health Association, 1968.

2. Henrik L. Blum, *Planning for Health--Development and Application of Social Change Theory*. New York: Human Sciences Press, 1974.

3. Marc Lalonde, *A New Perspective On the Health of Canadians--A Working Document*. Ottawa: Government of Canada, 1974.

4. U.S. Department of Health, Education, and Welfare, *Forward Plan for Health--FY 1977-81*. Washington: Government Printing Office, 1976.

5. "HEW's Child Health Failure," *Congressional Record*, July 16, 1974.

6. Nedra B. Belloc, "Relationship of Health Practices and Mortality," *Preventive Medicine*, 2:67-81, 1973.

7. Henrik L. Blum, "From a Concept of Health to a National Health Policy," *American Journal of Health Planning*, 1,1: 3-22, July, 1976.

8. U.S. Department of Health, Education, and Welfare, *Forward Plan for Health--FY 1978-82*. Washington: Government Printing Office, 1976.

9. "Constitution of the World Health Organization," *Yearbook of the United Nations--1946-7*. Lake Success, N.Y., 1947.

10. Personal communication in 1977 from the DHEW National Clearinghouse for Smoking and Health regarding deaths associated with smoking (rough estimate); *Statistical Abstracts of the United States--1975*, citing Department of Defense's Selected Manpower Statistics regarding the "Vietnam Conflict."

11. U.S. Department of Health, Education, and Welfare, *Health--United States, 1975*. Washington: Government Printing Office, 1976.

12. U.S. Senate Select Committee on Nutrition and Human Needs, *Nutrition and Health*. Washington: Government Printing Office, 1975.

13. Laurence E. Morehouse and Leonard Gross, *Total Fitness in Thirty Minutes a Week*. New York: Simon and Schuster, 1975.

14. Aaron Antonovsky and Harriet Hartman, "Delay in the Detection of Cancer: A Review of the Literature," *Health Education Monographs*, 2,2:98-128, Summer, 1974.

15. Milton S. Davis, "Variations in Patients' Compliance with Doctors' Orders: Analysis of Congruence between Survey Responses and Results of Empirical Investigations," *Journal of Medical Education*, 41,11: 1037-1048, November, 1966.

16. U.S. Department of Health, Education, and Welfare, *Alcohol and Health--New Knowledge*. Washington: Government Printing Office, 1974.

17. Based on an estimated 15 percent increase in FY 1977 over the $139.3 billion spent for medical care in FY 1976. The 1976 figure comes from the Social Security Administration's *Research and Statistics Note*, No. 27, December 22, 1976.

18. John W. Farquhar, "Interdisciplinary Approaches to Heart Disease Prevention," paper presented to the American Association for Advancement of Science, in New York, 1975. Published in *Disease Control and Health Education and Promotion*, Hearings before the Subcommittee on Health of the Committee on Labor and Public Welfare, U.S. Senate, May 7-8, 1975. Washington: Government Printing Office, 1975.

19. Charles Avery, Lawrence W. Green, and Sidney Kreider, "Reducing Emergency Visits of Asthmatics: An Experiment in Patient Education," paper presented at a hearing in Pittsburgh of the President's Committee on Health Education in 1972.

20. Thomas S. Inui, "Effects of Postgraduate Physician Education on the Management and Outcomes of Patients with Hypertension," masters thesis at Johns Hopkins School of Hygiene and Public Health, 1973.

21. U.S. Department of Health, Education, and Welfare, *Fluoridation Census--1969*. Washington: Government Printing Office, 1970.

22. U.S. Department of Health, Education, and Welfare, *Fluoridation Census 1975*. Atlanta: Government Printing Office, 1977.

23. James A. Johnson, Harold W. Collins, Victor L. Dupuis, and John H. Johansen, *Introduction to the Foundations of American Education*. Boston: Allyn and Bacon, Inc., 1969.

24. Arthur D. Little, Inc., *A Survey of Consumer Health Education Programs*. Cambridge, Massachusetts: Arthur D. Little, Inc., 1976.

25. U.S. Department of Health, Education, and Welfare, *The Report of the President's Committee on Health Education*. Washington: Government Printing Office, 1973.

26. Elena Sliepcevich, *School Health Education Study--Summary Report of a Nationwide Study of Health Instruction in the Public Schools*. Washington: SHES, 1964.

27. Anne S. Castile and Stephen J. Jerrick, *School Health in America--A Survey of State School Health Programs*. Kent, Ohio: American School Health Association, 1976.

28. U.S. Department of Health, Education, and Welfare, Social Security Administration, *Research and Statistics Notes*, No. 27, December, 1976.

29. Task Force on Consumer Health Education, National Conference on Preventive Medicine, *Health Promotion and Consumer Health Education*. New York: Prodist, 1976.

30. U.S. Department of Health, Education, and Welfare, Social Security Administration, guidelines sent to fiscal intermediaries in July, 1974.

31. Personal communication from Commissioner, Medical Services Administration, Social and Rehabilitation Service, DHEW, 1975.

32. Blue Cross Association, "White Paper: Patient Health Education," processed, 1974.

33. "Statement on a Patient's Bill of Rights," affirmed by the American Hospital Association's Board of Trustees on November 17, 1972, *Hospitals*, 47,4:41, February 16, 1973.

34. "Statement on the Role and Responsibilities of Hospitals and Other Health Care Institutions in Personal and Community Health Education," approved by the American Hospital Association, May, 1974, processed.

35. The American Hospital Association's patient education survey is being supported through DHEW Contract No. 200-75-0542.

36. *The Community Health Education Project--Final Report*. Washington: American Public Health Association, 1976.

37. The APHA Prevention Practitioner Project is being supported through DHEW Contract No. 200-75-0511.

38. "Making Health Education Work," *American Journal of Public Health*, Volume 65, Supplement, October, 1975.

39. *National Consumer Health Information and Health Promotion Act of 1976*, Public Law 94-317, 94th Congress, June 23, 1976.

40. Personal communication from Nancy A. Hazleton, Health Education Specialist, DHEW Region V, Chicago, 1977.

41. *National Health Planning and Resources Development Act of 1974*, Public Law 93-641, 93rd Congress, January 4, 1975.

42. Halbert L. Dunn, "Points of Attack for Raising the Levels of Wellness," *Journal of the National Medical Association*, 49:225-35, July, 1957.

43. Milton Terris, "Approaches to An Epidemiology of Health," *American Journal of Public Health*, 65,10: 1037-45, October, 1975.

44. Carter V. Good, editor, *Dictionary of Education*. New York: McGraw-Hill Book Company, 1973.

45. Everett M. Rogers, *Diffusion of Innovations*. New York: The Free Press of Glencoe, Inc., 1962.

46. Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, *Health Education*. Washington: National Education Association, 1948.

47. World Health Organization, *Expert Committee on Health Education of the Public--First Report*. Technical Report Series No. 89. Geneva: World Health Organization, 1954.

48. World Health Organization, *Planning and Evaluation of Health Education Services--Report of a WHO Expert Committee*, Technical Report Series No. 409, Geneva: World Health Organization, 1969.

49. "New Definitions: Report of the 1972-3 Joint Committee on Health Education Terminology," *Health Education Monographs*, No. 33: 63-70, 1973.

50. Ronald L. Nuttall and Richard S. Bolan, "The Success of Health Plan Implementation: A Test of A Theory, Volume II" Chestnut Hill, Massachusetts: Boston College, Laboratory for Statistical and Policy Research, 1976 processed.

51. U.S. Department of Health, Education, and Welfare, Bureau of Health Planning and Resources Development, "Health Systems Agency Performance Standards Guidelines," February 1, 1977.

52. William J. Waters, "Community Health Planning Steps and Procedures: A Functionally Based, Annotated Bibliography of 50 Selected References," Council of Planning Librarians, Exchange Bibliography No. 615, (P.O. Box 229, Monticello, IL 61856), July, 1974.

53. Herbert H. Hyman, *Health Planning--A Systematic Approach*. Germantown, Maryland: Aspen Systems Corporation, 1975.

54. Harold W. Demone, "The Theory and Practice of Program Planning." Presented at the Annual Meeting of the Society of Public Health Educators, Boston, in 1964. Processed, 1965.

55. Daniel Sullivan, "Model for Comprehensive, Systematic Program Development in Health Education," (wall chart). Ojai, California, 1973.

56. U.S. Department of Health, Education, and Welfare, Bureau of Health Planning and Resources Development, "Guidelines Concerning the Development of Health Systems Plans and Annual Implementation Plans," December 23, 1976.

57. U.S. Department of Health, Education, and Welfare, Bureau of Health Planning and Resources Development, "Draft Guidelines for the Development of the State Health Plan," May 12, 1977.

58. *Webster's New Collegiate Dictionary*, Springfield, Massachusetts: G. & C. Merriam Company, 1973.

59. U.S. Department of Health, Education, and Welfare, National Center for Health Statistics, *Selected National Data Sources for Health Planners*, Publication No. HRA 76-1236. Washington: Government Printing Office, 1976.

60. U.S. Department of Health, Education, and Welfare, Bureau of Health Planning and Resources Development, *Guide to Data for Health Systems Planners*, Publication No. HRA 76-14502. Washington: Government Printing Office, 1976.

61. *Probability Tables of Deaths in the Next Ten Years from Specific Causes*. Health Hazard Appraisal Program, Methodist Hospital of Indiana, 1604 N. Capitol Avenue, Indianapolis, Indiana 46202.

62. Lewis C. Robbins and Jack H. Hall, *How to Practice Prospective Medicine*. Indianapolis: Methodist Hospital of Indiana, Health Hazard Appraisal Program, 1970.

63. Irwin M. Rosenstock and John P. Kirscht, "Practice Implications," in "The Health Belief Model and Personal Health Behavior," *Health Education Monographs*, 2,4:470-3, Winter, 1974.

64. Ronald G. Havelock, *Planning for Innovation through Dissemination and Utilization of Knowledge*. Ann Arbor, Michigan: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, University of Michigan, 1969.

65. Leo G. Reeder, Linda Gordon Ramacher, Sally Gorelnik, *Handbook of Scales and Indices of Health Behavior*. Pacific Palisades, California: Goodyear Publishing Company, Inc., 1976.

66. U.S. Department of Health, Education, and Welfare, *National Health Guidelines: The Priorities of Section 1502*. Washington: Government Printing Office, 1977.

67. Names, addresses, and telephone numbers of professional health education associations are presented in Chapter X of this guide.

68. *Health Education Monographs*, 5,1:75-98, Spring, 1977.

69. "Grassroots Planning Gives Priority to Health Education," *Health Education Report*, 1,1:6, November-December, 1973, derived from *Ventura County Health Plan for 1973*, Comprehensive Health Planning Association/Regional Medical Program of Ventura County, 1972.

70. Daniel Sullivan, "Sedgwick County's Exploratory Program in Chronic Disease Education," processed, 1957.

71. U.S. Department of Health, Education, and Welfare, Health Resources Administration, *Papers on the National Health Guidelines: Baselines for Setting Health Goals and Standards*. Washington: Government Printing Office, September, 1976.

72. Robert F. Mager, *Preparing Instructional Objectives*. Belmont, California: Fearon Publishers, 1962.

73. Committee on Evaluation and Standards, "Glossary of Evaluative Terms in Public Health," *American Journal of Public Health*, 60,8:1546-1552, August, 1970.

74. DHEW, Bureau of Health Planning and Resources Development, "Preamble to the Guidelines Concerning the Development of Health Systems and Annual Implementation Plans," March 1, 1977.

75. Correspondence from Marian W. Emerson, Health Education Coordinator, Orange County Health Department, P.O. Box 355, Santa Ana, CA 92702.

76. Robert M. Thorner, "Health Program Evaluation in Relation to Health Programing," *HSMHA Health Reports*, 86,6: 525-532, June, 1971.

77. Lawrence W. Green and Irene Figa-Talamanca, "Suggested Designs for Evaluation of Patient Education Programs," *Health Education Monographs*, 2,1:54-69, Spring, 1974.

78. "Doctor Education Leads to Effective Patient Education," *Health Education Report*, 1,3:7, March-April, 1974; a summary of Thomas S. Inui, "Effects of Postgraduate Physician Education on the Management and Outcomes of Patients with Hypertension," masters thesis at Johns Hopkins University School of Hygiene and Public Health, 1973.